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# Nutrition Education at First Glance

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# **Nutrition Education at First Glance**

Kenmore, Ohio

**University of Akron- Honor's College**

Honor's Research Project 2016

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## **1. Review of the Literature**

The goal of our program was to expose teen-aged and young mothers facing economic and educational barriers, with limited resources, to nutrition education in a way they have not previously experienced which aligns with current research concerning effective instruction. In order to create a successful intervention program, it was important to more fully understand the general population we intended to reach and their nutritional needs.

Statistics indicate the number of teen mothers has been declining in the past ten years. In 2005 Summit County had 1,169 babies born to women between the ages of 10-19, and the most current data shows only 1,060 births within that same age range (Ohio Department of Health). While this is an encouraging trend, the rate of teen pregnancy in America overall is among the highest when compared to other developed Western countries (CDC). Preliminary numbers show that 9,473 of the 249,078 live births from American teen mothers in 2014 occurred in Ohio, resulting in \$340 million in costs associated with pregnancy (The National Campaign to Prevent Teen and Unplanned Pregnancy). The cost of this undesirably high number of teen births not only affects the physical, but also mental, educational, and developmental health of mothers, both as people and as parents. Furthermore, these effects extend to their children and their development.

Teen mothers are caught in limbo, where they are both children and adults, and this tension is neither understood, nor supported by society. Davis, et al. identify the struggle concisely, stating that, “developmentally, the teen mother is trying to become

more autonomous while simultaneously remaining financially and often physically dependent upon her parents” (Stile, 2008). Consequently, this population has a high rate of depression, with 42% of pregnant teens exhibiting mental health problems including, but not limited to, depression, and 53.6% showing signs of depression within one year postpartum (Cox, 2008). So these children, because they are still children, are experiencing identity crises, mental health struggles, and additionally, physical struggles with their changing bodies. Whether related to the pregnancy weight gain itself, the postpartum depression, environmental factors, or a mix of all three, teen mothers are at an increased risk of obesity (Cox, 2008). While the recommended amount of weight gain for a single pregnancy is between 25-35 pounds, teen mothers are more likely than women who get pregnant in their twenties, to gain 40 pounds or more (Brown, 2015). These mothers typically continue to gain weight after pregnancy as well (Davis, 2013). In light of these facts alone, a health education intervention seems like a natural conclusion when considering how to improve health outcomes in this population. Adolescents with children, however, cannot focus solely on personal education. They must step out of childhood and into the role of a parent who is now responsible for the life and education of another. Sadly, these children are very underprepared for this role.

Providing for the needs of a child physically and financially is difficult in even the most desirable situations and teen mothers, due to their age, are at an even greater disadvantage. Most do not have the resources available to provide for their children on their own as they have no educational degree, may still be in school, or are not able to find suitable employment to cover the costs of having a child. Fortunately there are government assistance programs available like the Supplemental Nutrition Assistance

Programs (SNAP) and Women Infant and Children (WIC) services that can offer help providing food; large percentage of this population leans heavily on these programs. Nationwide 63% of teen mothers are enrolled in government assistance programs, and for many the funds given by the government are the only way they cover their grocery bills (US Census Bureau, 2008). The reliance on government support in feeding and caring for children often determines the level of nutrition teenage mothers can provide their children.

Nutrition quality is not the only facet affected in the life of a child of teen pregnancy. Indeed, children born to teen mothers are subject to continuing obstacles in many areas of their lives. In a community with a population similar to Ohio, the children born to teen mothers made up 27% of first-year hospitalizations, 34% of deaths before 17 years, 30% of failures to graduate high school, 44% on welfare as young adults, and 56% of next-generation young teen mothers (Jutte, 2010). In general, being the product of teen pregnancy increases the risk for poorer educational outcomes than their counterparts, lower quality of life and personal satisfaction, and an even lower income (−\$7,262) later in life than those born to comparatively older mothers (Lipman, 2011). Additionally, children of teen mothers who are overweight themselves are at an increased risk of pediatric obesity since obesity causing behaviors are regularly modeled to them (Davis, 2013). This is the environment children of teen pregnancy experience, revealing the need for additional developmental and nutrition support.

The impact of teenage pregnancy extends into the educational realm as well. The majority of teen mothers do not complete high school. The National Campaign to Prevent Teen and Unplanned Pregnancy found that in women experiencing pregnancy before the

age of 18, only 38% complete their high school education by the age of 22 (2012). The numbers are even smaller for the attainment of college degrees, with only 2% of young teen moms graduating college before the age of 30.

In light of statistics such as these, it becomes even more essential to create interventions that incorporate the latest, evidence-based effective teaching strategies when working with teenaged and young mothers to improve their nutrition knowledge. The current instructional strategy advocated in the educational community is the learner-centered approach to teaching. Instead of teachers simply relaying information to students, they act as facilitators of student learning (Blumberg, 2008). Students play an active role in their learning and multiple instructional strategies are incorporated. The American Psychological Association evaluated research supporting this approach and produced five domains, which serve to justify its use. The learner-centered teaching model emphasizes and increases students' 1. Knowledge base, 2. Strategic processing and executive control, 3. Motivation and affect, 4. Development and individual differences, and 5. Situation or context (Blumberg, 2008). In this "problem-posing" method of instruction, all participants in the education process act as both teachers and students, developing "their power to perceive critically *the way they exist* in the world *with which* and *in which* they find themselves" (Freire, qtd. In Canestrari & Marlowe, 2013).

Within this learner-centered framework, effective instruction aligns with the Seven Principles for Good Practice in Undergraduate Education compiled by the United States Department of Education. Such practice 1. Encourages contact between students and faculty, 2. Develops reciprocity and cooperation among students, 3. Uses active learning techniques, 4. Gives prompt feedback, 5. Emphasizes time on task, 6.

Communicates high expectations, and 7. Respects diverse talents and ways of learning (Chickering & Gamson, 1987). These principles highlight the need for the incorporation of specific learning goals, student-teacher discussion, student voice, student engagement, and intentional assessment in the program being created.



## **2. Intervention**

Our first step in implementing an effective nutrition education program was assessing the prior-knowledge and needs of our specific population. The population consisted of teen-aged and young mothers participating in intervention programs offered by a local organization in Kenmore, Ohio. A survey was designed to determine the general educational and financial position of the participants, the types of governmental assistance utilized by participants, and the thoughts and attitudes towards cooking and healthy eating held by participants (See Appendix A). The second part of the pre-assessment involved a round room discussion aimed at uncovering the participants' existing knowledge regarding nutrition, what they wanted to learn, and what problems they feel prevent their engagement in healthy eating habits, such as lack of money, lack of knowledge, dislike of foods, etc. (See Appendix C). The discussion was recorded and analyzed alongside survey results in order to create the most effective unit plan.

Six weeks after the initial discussion, the actual implementation of the nutrition unit began. The program consisted of seven lessons spread throughout a four-month period, with mini lessons in-between to foster consistency throughout the program. A concluding lesson acted as a final assessment and review for the unit. Of these seven lessons, four were modified and implemented in the children's preschool/kindergarten readiness program at First Glance. Each lesson incorporated the cognitive, affective, and psychomotor domains of learning, and intentional planning ensured a student-centered approach to instruction. Of the seven lessons, four of them involved participants' active involvement in the kitchen and preparation of the night's meal. Each of the lessons

focused on a different culture's eating style and the nutritive aspects easily gleaned from them. The remaining three lessons, dispersed throughout the four cooking lessons, aimed to teach the basic science behind nutrition, the importance of developing habitual healthy eating practices, and effective nutrient-dense eating on a budget. After each lesson, an exit-slip provided an assessment as well as a gauge for measuring participant's attitudes towards the lesson's activities. Participants also left each lesson with a small card of five tips to incorporate in their weekly eating.

These notecards provided the basis for part of the final assessment. A point system was set up around each week's five tips. One tip was emphasized each week and given an extra point value. Participants who demonstrated continual and increasing incorporation of these tips into their daily lifestyle earned more points. During the final cumulative lesson, the top point earners received gift cards to their local grocery store. The central part of the final assessment, though, was a potluck in which each participant cooked and brought her own dish, complete with a recipe card and an explanation of how their dish incorporated material from the unit.

The final component to this study was a follow-up assessment eight weeks following the last lesson. A second survey and round room discussion were conducted to evaluate the unit's effectiveness in producing lasting knowledge and changes in participant's lifestyles, respectively. This survey and discussion were designed to be easily compared to the results from the pre-test while also measuring the retention of new materials learned.

### 3. Unit Plan and Lesson Plans

## Unit Plan

<b>Week 1</b>	Lesson 1: What does food do to my Body? Mini Kids: sensory foods- black beans, water chestnut, plum
<b>Week 2</b>	Mini Moms- 10 min breakfast- banana roll up (other idea sheet) Challenge- points for making breakfast three times this week Kids- Modified Lesson 1
<b>Week 3</b>	Lesson 2: Asian Appetite
<b>Week 4</b>	Mini Moms- Label reading Challenge-bring in a food label with surprising nutrition facts Kids- Mock Meal
<b>Week 5</b>	Lesson 3: Mexican Measurements
<b>Week 6</b>	Kids- Tacos: follow a recipe and portion sizes
<b>Week 7</b>	Lesson 4: Healthy Habit Hunting Mini Kids: sensory foods- avocado, hummus, hard noodles
<b>Week 8</b>	Pumpkin patch- do nothing!
<b>Week 9</b>	Mini moms- Hydration station Challenge: replace one sugar sweetened beverage with a flavored water
<b>Week 10</b>	Lesson 5: Knowledge and Noodles
<b>Week 11</b>	Lesson 6: Middle Eastern
<b>Week 12</b>	Lesson 7: Grocery Store!
<b>Week 13</b>	Potluck Party

# Lesson Plan

## Context

**Title:** What Does Food Do to My Body?

**Date:** 9-8-15

**Time Allocation:** 1 hour

**Instructional Objective:** After an interactive lesson on the negative effects that excess salt, fat, and sugar have on the human body, moms will be able to verbally explain how they would transfer this knowledge to their children and/or people they live with.

## Rationale ~ Why Teach This Lesson??

All of the teen moms and young moms know that items like pop, chips, fast food, and candy are unhealthy food choices. During a discussion session with the moms in the mid-summer, they expressed their limited knowledge and a desire to know the *ways* these foods damage their bodies. They will not be motivated to change the way they eat unless they know why their current eating habits are hurting their bodies and their children's.

## Procedure

**Materials:** Snack for moms, Digestion poster, ketchup and mustard bottle, water with red food coloring, salt, timer, fat and muscle model, clogged artery progression model, 5 Fat or Fiction trivia cards, 10 sugary beverage bottles, Added sugar model, 3D slips, and 3 x 5 take home cards

**References:** <http://authoritynutrition.com/10-disturbing-reasons-why-sugar-is-bad/>

[http://www.heart.org/idc/groups/heart-](http://www.heart.org/idc/groups/heart-public/@wcm/@global/documents/downloadable/ucm_305572.pdf)

[public/@wcm/@global/documents/downloadable/ucm\\_305572.pdf](http://www.heart.org/idc/groups/heart-public/@wcm/@global/documents/downloadable/ucm_305572.pdf)

[http://www.portagehealth.org/Classes\\_and\\_Resources/Resources/Heart Health Trivia Answers/](http://www.portagehealth.org/Classes_and_Resources/Resources/Heart_Health_Trivia_Answers/)

### Description:

#### I. Introduction: How does food move through the body?

- **Time:** 5 min
- **Explanation:** Pass out the snack and while moms are munching, use the digestion poster to explain the step-by-step process of digesting food.

#### II. Activity 1: Too Much Salt

- **Instructional Method:** Saltwater Demonstration
- **Time:** 10 min
- **Domain:** Cognitive
- **Grouping:** Whole group
- **Explanation:** Have the ketchup and mustard bottles labeled "healthy hearty" and "salty heart." Fill both bottles half way with red-dyed water. Explain that your body contains a certain volume (amount) of blood that gets pumped through your body roughly 1,000 times per day. Pour 3 Tbsp. of salt into the "salty heart" bottle. Say that when you eat excess salt, it thickens the blood, so your body pulls water out of the cells and into the blood, increasing blood volume and making you feel bloated. Pour more water into the "salty heart" bottle. Now the volume of blood has increased, but the heart still has to pump it all throughout your body. Ask two girls to come take the bottles. Holding them upside down over Styrofoam bowls, start the timer and have the first girl pump all the liquid out of the "healthy heart" bottle at a steady pace. Record the time it took. Have the second girl try to empty the contents of the "salty heart" in the same amount of time.

**Explain:** While some salt is necessary for your body to function properly, too much has a negative effect on your blood pressure and heart. When excess salt is in your body it pulls the water into your cells making you feel bloated. Worse than the discomfort of feeling fat, excess salt has a serious effect on your heart and arteries. The increased

blood pressure makes your arteries become stiff and difficult to pass blood through. When the blood does get to the heart, the heart has to work extra hard to pump all the blood through it. Just like your fingers get stiff when you squeeze something too hard or too long, our hearts also get stiff and will, eventually give out.

- **Transition:** Too much salt and a tired heart are only part of the factor in heart disease. The other large factor in heart attacks and heart failure is clogged arteries that come from too much fat!

### III. **Activity 2: Too Much Fat**

- **Instructional Method:** Fat or Fiction Game
- **Time:** 15 min
- **Domain:** Cognitive and Psychomotor
- **Grouping:** Whole Group
- **Explanation:** Hold the first trivia card, read it out loud, and ask the moms who thinks it is fact and who thinks it is fiction. After revealing the answer, give a correlating tidbit of knowledge of what fat is and how it affects the body. Repeat with all five cards

1. **All Fat is Bad – Fiction:** There are many different types of fat- saturated fat, polyunsaturated fat, monounsaturated fat, trans fat, etc.- and while all of these are bad in excess some are worse than others. Trans fats should be avoided all the time. They are found in fried foods, margarine, and most packaged/processed foods. These are the ones that raise your bad cholesterol and can clog up the arteries in your heart like in this model (pass around clogged artery progression model). Saturated fats are those solid at room temperature such as butter. While these fats can still play a role in a healthy diet, unsaturated fats are the best for your body. Fats found in olive oil, avocado, and nuts actually can lower your bad cholesterol and can raise good cholesterol.
2. **When you are active, your body uses fat first – Fiction-** The first thing your body burns for energy is carbohydrates, so being active isn't enough to burn fat. Fat is best burned during aerobic exercise- think running, power walking, jump-rope, biking, anything that gets your heart rate up and leaves you a little out of breath.
3. **When you don't eat enough, your body stores fat instead of burning it – Fat-** When you don't give your body the food it needs to perform its basic tasks like breathing, thinking, pumping blood, walking around it enters starvation mode. In starvation mode any food you eat your body squirrels away and stores it as fat. Since it doesn't know when you are going to feed it next, it hangs on to everything you give it. If you are trying to lose weight, not eating altogether will hurt you more than help you. Eat consistently, just eat less quantity.
4. **Fat weighs less than muscle- Fat –** Even though muscle takes up less space it actually is more dense than fat. Two people can weigh the same amount but have completely different body sizes. Take a look at this pound of muscle and compare it to this pound of fat (pass around fat and muscle models). This is why it is very important to focus more about healthfulness than what the number on the scale says.
5. **Healthy people have zero body fat – Fiction-** Some fat is necessary for normal body functions! Fat works to keep you warm, protects your organs, and is even necessary for your brain to function quickly and efficiently. So don't think that you need to get rid of all the fat on your body in order to be healthy.

- **Transition:** What makes weight gain easy? Pairing it with sugar! Candy Bars provide a double whammy of excess fat and excess sugar

### IV. **Activity 3: Too Much Sugar**

- **Instructional Method:** Beverage Demonstration
- **Time:** 15 min
- **Domain:** Affective, Psychomotor
- **Grouping:** Pick 5 girls

· **Explanation:** Have the girls approach the line of drinks and choose their favorite. Have them line up in the order of which drink they assume has the most sugar. Repeat the activity asking them to choose a drink for their kid. Drink choices: Diet pop, regular pop, energy drink, Frappuccino, sweet tea, milk, Gatorade, fruit juice, Capri Sun, Fruit flavored water

After revealing the real amounts of sugar, explain to the moms how this affects their body and stress the importance of healthy habits for both their children and themselves. Explanation: The added sugar in these beverages translates into empty calories that add up causing you to pack on pounds while creating an addiction only satisfied by more sugar. Eating excess sugar stresses your liver, which is need to filter toxins out of your body; your pancreas, which is the organ affected in diabetes; it weakens your immune system, causing you to get sick more often; gives you cavities which are expensive for you, and is a leading cause of cancer and obesity.

· **Transition:** That was a lot of information! So, before we go let's break it down into manageable bites.

**V. Closure: Explain the "3D" application and ask girls to write out one thing they discovered, one thing they dig, and one thing they would ditch. Once they turn that in, pass out note cards with 5 tips for today!**

1. Read the sodium content on the packaged foods you're eating; it can be surprising!
2. Reduce sugar by getting rid of one sugary drink per day and replace it with water.
3. When you're craving a crunchy snack, instead of fatty potato chips, try nuts or trail mix. Carrots and celery have a nice crunch too J
4. Take the saltshaker off the table, and try herbs and seasonings to flavor your food!
5. Anytime you tell your kid to eat a fruit or vegetable, eat one yourself. Your body deserves to be healthy too!

## Assessment

Have the moms explain how they will transfer this information to their kids and families. While they moms are filling out 3d slips, give them various scenarios regarding their children wanting certain unhealthy foods (like asking for potato chips, soda, candy bars, etc.), and have the moms state how they would explain to their kids why they are unhealthy.

## Modifications

For the Tiny Glancers, this lesson will look a little different.

**Lesson Objective:** After an explanation of the way daily foods are broken into fractions of grains, proteins, fats, fruits and veggies, and sugars, small demonstrations of the way salt, fat, and sugar can hurt your body, and provided with a list of foods, children will construct their own fraction plate of foods using their favorite food from each category.

I. **Introduction:** This will include an overview of the terms "grain," "protein," "fat."

II. **Activity One: fat, grain, protein Game:** Place the paper plates labeled, "fat," "grain," and "protein" on the floor, creating three sections in the room. As the teacher yells out one of the terms, students must run to that section. For an advanced game, yell out certain foods like "bread" "Chicken" or "butter" and see if they can run to the right section.

**Rationale:** this game will build, extend and familiarize students' food-related vocabulary as well as prepare them for the following activities. Also, it allows the children to have fun and run around!

III. **Activity Two Sugar:** repeat mother's activity, asking students to guess how many sugar cubes are in their favorite drink. Explain the bad things it does to their bodies

**Rationale:**

IV. **Activity Three, My Plate:** Students will be provided with triangular sections of paper plates representing different food groups. The triangles will be varying sizes representing the

correct proportion each food group makes up in a balanced diet. Students will each be given a plain whole plate and asked to arrange triangles on top, completely filling the plate.

V. **Closure:** Explain to kids the only way to have a healthy plate is to have each of the food groups represented. If students pick three “fats” their circle will not fit together!

# Lesson Plan

## Context

**Title:** Modified Lesson 1: My Healthy Plate

**Date:** 9-15-15

**Time Allocation:** 40 min

**Instructional Objective:** Following a small demonstration of why sugar harms your body, and after an explanation of the way daily foods are split into fractions of grains, proteins, fats, fruits, children will construct their own fraction plate of foods using their favorite foods from the bank of words provided.

## Procedure

**Materials:** paper plates labeled “fat,” “grain,” and “protein,” empty beverage bottles, pre-portioned amount of sugar cubes for each beverage, paper plates, cut up paper plates with different foods drawn on them

### Description:

#### I. Introduction

- **Time: 5 Min**
- **Explanation:** Paper plates labeled “Fat,” “Grain,” and “Protein,” will be used to introduce students to three major food groups and a brief explanation of each will be made.

#### II. Activity 1: “Fat, Grain, Protein!”

- **Instructional Method:** Interactive Game
- **Time:** 5 min
- **Domain:** Psychomotor
- **Grouping:** Whole group
- **Explanation:** Place the paper plates labeled, “fat,” “grain,” and “protein” on the floor, creating three sections in the room. As the teacher yells out one of the terms, students must run to that section. For an advanced game, yell out certain foods like “bread” “Chicken” or “butter” and see if they can run to the right section.
- **Rationale:** This game will build, extend and familiarize students’ food-related vocabulary as well as prepare them for the following activities. Also, it allows the children to have fun and run around!
- **Transition:** Ask the students what foods have NOT been mentioned yet. Explain that there is one group of foods that simply does not belong on our plates: sugary foods

#### III. Activity 2: Sugar Cubes

- **Instructional Method:** Question/Answer, Discussion
- **Time:** 10 min
- **Domain:** Cognitive, Affective
- **Grouping:** Whole Group
- **Explanation:** Have empty beverage containers lined up. Ask students to choose their favorite drink. Then, they have to guess how many sugar cubes are added to that drink. After they guess, allow them to drop sugar cubes into the bottle until the accurate amount is reached. Explain that our body gets plenty of sugar from the fruits and veggies we eat, and continue to explain the negative effect white sugar has on our bodies!
- **Rationale:** This activity gives students a visual of the amount of sugar they commonly consume as it incorporates beverages students choose for themselves. It provides students to practice basic math skills such as estimation and counting.
- **Transition:** “Now we know some foods that our body needs, and some foods that do not need to be on our plates. Now let’s see how they all come together!”



#### IV. **Activity 3: Fraction Food Puzzle**

- **Instructional Method:** Interactive Puzzle
- **Time:** 15 min
- **Domain:** Psychomotor, Affective
- **Grouping:** Individual Work
- **Explanation:** Students will be provided with triangular sections of paper plates representing different food groups. The triangles will be varying sizes representing the correct proportion each food group makes up in a balanced diet. Students will each be given a plain whole plate and asked to pick some of their favorite foods and arrange them on their plate, completely filling the plate.

There will be some oddly shaped pieces with unhealthy food choices such as ice cream and French fries drawn on them. Explain to students that these foods do not fit on healthy plate. It is also possible to have all healthy foods, but if you do not have foods from each of the different food groups, the pieces still will not fit to make a healthy plate. Ask students to come up with other foods that could go on their plates. Also mention that the “fat” food group is included in some of the proteins and on top of carbs (butter) and healthy drinks (like milk) can add fat and protein too!

- **Rationale:** This lesson helps students to practice choosing healthy foods for themselves, letting them work with foods they are comfortable with and enjoy as well as introducing them to new foods. It encourages cognitive developmental growth through puzzle solving, and provides a very light introduction to percent and fractions. Even though the students are not mentally calculating fractions and percent, they are working with the general concepts that a whole can be broken up into parts of various sizes. This is a personal and kinesthetic activity. Students are in charge of their work and actively working.

- **Transition:** Have them tape their finished plate together. Say, “now that you know all the elements of healthy plate, you can create your own when you eat at home!”

#### V. **Closure:** Ask students to share their completed meals with their classmates, pointing out the different elements and saying why they chose them.

#### **Modifications/Accommodations**

- Guide younger students in completing the puzzle in activity three, outlining the puzzle pieces on their blank plates if necessary.

#### **Assessment**

- The students will be informally assessed for prior knowledge during activity 1 when real foods are called out instead of the terms “grain,” “protein” and “fat.”
- The paper plate activity will serve as a formal assessment

# Lesson Plan

## Context

**Title:** Asian Appetite

**Date:** 9-22-15

**Time Allocation:** 2 hours

**Instructional Objective:** After a discussion on Asian food culture, moms will cook their own stir-fry meal and be able to repeat the process for more than one person.

## Rationale ~ Why Teach This Lesson??

This lesson will help expand the moms' conception of healthy foods by exposing them to another culture's eating habits. Asian culture emphasizes family mealtime and table manners, both concepts we want to help the moms establish for their children, as these children will be expected to have good manners at school meal times. Finally, this lesson will strengthen math skills, as the moms will need to take individual portion recipe cards and utilize them for their whole family.

## Procedure

**Materials:** Food pyramid picture, bowl, chopsticks, slips of paper with Asian dishes written on them, whiteboard, marker, recipe cards, pens, ingredients for stir fry, cooking utensils, a kitchen, 3D slips, and 3 x 5 tips.

**References:** <http://www.asian-nation.org/asian-food.shtml>

<http://www.travelchinaguide.com/intro/cuisine.htm>

<http://www.ibiblio.org/chineseculture/contents/food/p-food-c01s01.html>

## Description:

### I. Introduction

- **Time:** 5 min
- **Explanation:** Ask the moms how making breakfast went the previous week and count up their points.

### II. Activity 1: Asian Food Culture

- **Instructional Method:** Lecture
- **Time:** 15 min
- **Domain:** Cognitive
- **Grouping:** Whole Group
- **Explanation:** Explain that in Asian culture, meal times are when families gather together, and respect is of the utmost importance. Children honor their elders, and in turn are valued members of the family. All of the food is placed on the table before a meal begins, and typically an adult says a few words before the eating begins.  
Explain what they eat: Asians put a large emphasis on starches and vegetables, and have relatively less meat in their diets than the typical American. When they do eat meat, fish is a common choice. Rice is a main staple. Show Asian food pyramid. Asian food often combines all flavors into one dish: sweet, salty, spicy, bitter, and sour. Give the three main categories of Asian dietary culture, explaining how each one emphasizes different grains, starches, proteins, etc.
- **Transition:** Some research says that the average Asian citizen eats half as much fat and one third as much protein as the average American. Not all Asian delicacies are healthy, though. Let's see what we can pull from this culture's cuisine.

### III. Activity 2: Food sorting

- **Instructional Method:** Lecture/Discussion
- **Time:** 15 min
- **Domain:** Cognitive/Psychomotor
- **Grouping:** Whole group

- **Explanation:** Pass around a bowl full of slips of paper with common Asian foods written on them. Have each mom use chopsticks to pull out a slip and read it out loud. Discuss each food. Do you know what it is? Is it healthy, or no? Is there a way to make it healthy?

Foods: fried rice, steamed fish, wontons, naan bread, noodles, egg rolls, fried duck, kung pao chicken, steamed vegetables, coconut milk, soy sauce, curry, beans, shrimp tempura, ginger, cilantro, pot stickers

- **Transition:** Now that we have pulled the healthy foods Asian cuisine provides us, let's see how to easily make it!

#### IV. **Activity 3: Stir-fry cooking**

- **Instructional Method:** Interactive
- **Time:** 1 and 1/2 hour
- **Domain:** Psychomotor/ Affective
- **Grouping:** individual/paired work
- **Explanation:** Have the single serve recipe for stir-fry written largely on white board. Pass out recipe cards with the quantities of ingredients missing. Ask the moms to fill in the quantities for the number of people they are making the meal for. Allow them to pair up with a friend if desired. Once everyone has their recipe, begin the cooking process! When the meal is finished, invite the children down stairs and the moms will eat dinner family style.
- **Transition:** When the moms are eating, pass out the 3d forms and 3X5 tips.

#### V. **Closure:** Everyone helps clean up!

### **Modifications/Accommodations**

The following week this lesson will be summarized with the kids using an interactive role-playing game. A brief summary of where Asia is and what Asian cultures eat will be followed by a mock "meal," where good manners and respect are emphasized. Needed: map, toy dishes, napkins, and snack.

### **Assessment**

The recipe cards will serve as a formal assessment for this lesson. We will informally assess the moms' knowledge as they conduct mealtime with their families.

Daily Beverage  
Recommendations:

6 Glasses of Water or Tea



Sake, Wine,  
or Beer in  
moderation



# Lesson Plan

## Context

**Title:** Asian Appetite Kids

**Date:** 9-29-15

**Time Allocation:** 40 min

**Instructional Objective:** After a discussion and activity on Asian food culture and etiquette, the students will conduct and participate in a mock family meal with respect for elders and consideration for others.

## Rationale ~ Why Teach This Lesson??

This lesson will help expand the children's schema for healthy foods and cultural differences by exposing them to another culture's eating habits. Asian culture emphasizes family mealtime and table manners, both concepts we want the children to be accustomed to, as they will be expected to have good manners at school meal times.

## Procedure

**Materials:** map or globe, white board and marker, bowl, chopsticks, slips of paper with Asian dishes on them, cd player, cd of Asian music, plates, napkins, small bowls, "sushi rolls," sugar snap peas, carrots, and goldfish crackers.

**References:** <http://www.asian-nation.org/asian-food.shtml>

<http://www.travelchinaguide.com/intro/cuisine.htm>

<http://www.ibiblio.org/chineseculture/contents/food/p-food-c01s01.html>

## Description:

### I. Introduction

- **Time:** 5 min
- **Explanation:** Ask the kids if they like Chinese food. What types? Ask if they know where China is and show Asia to them on the map.

### II. Activity 1: Asian Food Culture

- **Instructional Method:** Lecture/KWL
- **Time:** 10 min
- **Domain:** Cognitive
- **Grouping:** Partners
- **Explanation:** Ask each student to get with a partner and think of one thing they know about Asia. As students respond, make a list on the whiteboard. Repeat this for things they want to know about Asia, especially about their food.

Explain that in Asian culture, meal times are when families gather together, and respect is of the utmost importance. Children honor their elders, and in turn are valued members of the family. All of the food is placed on the table before a meal begins, and typically an adult says a few words before the eating begins. Emphasize how it is important to CONSIDER OTHERS when you are having a group meal.

Explain general types of food they eat: Asians put a large emphasis on starches and vegetables, and have relatively less meat in their diets than the typical American. When they do eat meat, fish is a common choice. Rice is a main staple. Asian food often combines all flavors into one dish: sweet, salty, spicy, bitter, and sour.

Now have the students demonstrate their new knowledge by working with their partner to come up with something they have learned. And adding a third column to the whiteboard chart.

- **Rationale:** This activity exposes students to a culture very different than their own, requires them to communicate with others, and practice relaying information they have just learned.

- **Transition:** Now we know a little more about how they eat in Asia, but what kind of food may you find if you went to a restaurant there?
- III. **Activity 2: Pass the Plate**
- **Instructional Method:** Game/Discussion
  - **Time:** 10 min
  - **Domain:** Cognitive/Affective/Psychomotor
  - **Grouping:** Whole group
  - **Explanation:** Explain that in Asian culture, mealtime is family time. Large dishes of each food are placed in the middle of the table, and people take turns getting their food. Place a bowl full of slips of paper with labeled pictures of common Asian foods in the middle of a circle. Turn on a song and pass around a pair of chopsticks. When the music stops, have the child holding the chopsticks reach for the bowl in the middle, pull out a slip, and read it out loud. Discuss each food. Do you know what it is? Is it a grain, fat, or protein? Is it healthy, or no? Is there a way to make it healthy?  
Foods: fried rice, steamed fish, naan bread, noodles, egg rolls, sweet and sour chicken, steamed vegetables, coconut milk, soy sauce, curry, beans, shrimp tempura, ginger, cilantro, sushi
  - **Rationale:** This game reinforces several concepts we are trying to teach students. It lets them practice passing a dish around a table, it measures their previous knowledge of Asian foods and introduces them to new foods, and it strengthens content learned in the previous lesson regarding grains, fats, and proteins. The music played also exposes them to another element of Asian culture, and the game requires listening, fine motor movement, and cooperation.
  - **Transition:** Now that we have talked about food, let's eat some!
- IV. **Activity 3: Mock Meal**
- **Instructional Method:** Interactive
  - **Time:** 20 min
  - **Domain:** Psychomotor/ Affective
  - **Grouping:** Whole group
  - **Explanation:** Tell students it is time to prepare a dinner party for our special guests, Caitlin and Josh. Emphasize the need for respect and good manners during this meal, just like they do in Asian culture. Begin by demonstrating how to set a place at a table, then have each student set their own. Bring out the food. Have students help place different dishes in the center of the table. Once everything is set up, call Caitlin and Josh in, and wait to sit down until they sit. Ask Allison, the eldest host, to say a few words of gratitude and pray over the meal. Have children wait until Allison, Sarah, Caitlin and Josh are served and have begun eating and then allow them to pass the dishes in the center around the table. Enjoy the meal!
  - **Rationale:** Active role-playing is a great way to reinforce concepts for students. By letting them practice good table manners, we hope to decrease the amount of chaos that is common among the mealtimes at First Glance.
  - **Transition:** Explain that no one leaves the table until everyone is finished
- V. **Closure:** Everyone helps clean up!

## **Modifications/Accommodations**

Younger students may require additional support when using chopsticks and when reading off the food items.

## **Assessment**

The KWL chart at the beginning of the lesson will inform us where the students' current understanding of Asian culture lies, and if or how it has changed due to the lesson. The mock meal will allow us to informally assess students' retention of the lesson goals.

# Lesson Plan

## Context

**Title:** Mexican Measurements

**Date:** 10-6-2015

**Time Allocation:** 2 hours

**Instructional Objective:** After a discussion about Mexican food culture, moms will be able to cook their own authentic meal for 4-6 people and appropriately portion each ingredient in the recipe.

## Rationale ~ Why Teach This Lesson??

This lesson will introduce the importance of portion sizes. Since Mexico is a poorer country, they make their meals go far by having healthy sized portions or a variety of foods. We want to show the moms what an appropriate portion looks like and how a filling meal can be created while not over eating. The moms will then be able to model this for their children.

## Procedure

**Materials:** piñata, slips of paper with Mexican foods written on them, 2 baskets, portion size model, ingredients for tacos, cooking utensils, kitchen, recipe cards, pens, 3D slips, 3x5 tips

**References:** <http://patismexicantable.com/blog/ingredients/>  
<http://ixtapacantina.com/mexican-eating-habits-you-didnt-know-about/>  
<http://www.foodbycountry.com/Kazakhstan-to-South-Africa/Mexico.html>

### Description:

#### I. Introduction

- **Time:** 10 min
- **Explanation:** Ask how previous week went and add up points.

#### II. Activity 1: Mexican Culture

- **Instructional Method:** Lecture
- **Time:** 10 min
- **Domain:** Cognitive
- **Grouping:** Whole Grouping
- **Explanation:** Mexicans style of eating is thought of as “delayed” but her parts of the world. While in American we eat around work schedules, typical Mexican culture is the opposite. They partake in an early breakfast, large afternoon meal, and small dinner. Explain that Mexican culture includes a variety of foods in its diet, focusing mainly on fruits and vegetables (and corn!!) as that is what is cheapest and most readily available. Corn is the main grain, usually eaten in some form at every meal (mostly as a tortilla). Each area of Mexico has different traditional dishes, based on what their area can provide. Coastal regions have more seafood, while the mountain areas have more beef and poultry. All regions rely on vegetables to round out their meals and lots of spice to make them delicious.

Explain what they eat: corn, tortillas from flour and corn, corn husks or banana leaves for tamales, chile peppers, avocados, beans, cactus paddles, spicy chorizo, shrimp, slow roasted pork, jicama, plantains, citrus fruits, white cheese, tomatillos, and pomegranates. These foods are highlighted with flavors from peppers, vanilla, cinnamon, chocolate, cilantro, and mole sauce, which comes in a variety of flavors.

- **Transition:** These foods are not what we most commonly think of when we think of Mexican.

#### III. Activity 2: Food Sorting Piñata

- **Instructional Method:** Lecture/Discussion
- **Time:** 15 min
- **Domain:** Cognitive/Psychomotor
- **Grouping:** Whole group



- **Explanation:** Have the hanging piñata filled with slips of paper with different Mexican dishes written on them, as well as some small candies. The moms will take turns hitting the piñata until it breaks. Upon breaking, the moms must quickly gather the slips of paper and sort them into a “Bueno” and “Mal” baskets. Then the contents of each basket will be pulled out and discussed. Why is it healthy/not healthy? Could it be made healthy?

Foods: beef tacos, salsa verde, chicken mole enchiladas, pork tamales, guacamole, loaded nachos, cheese quesadilla, refried beans with cheese, rice and beans, chile con queso, steak fajitas, pico de gallo

- **Transition:** None of these foods are necessarily hard to find or expensive to buy, and in the right portions they can make tasty and filling meals.

#### IV. **Activity 3: Taco making**

- **Instructional Method:** Interactive
- **Time:** 1 hour
- **Domain:** Psychomotor/ Affective
- **Grouping:** Individual/ paired work
- **Explanation:** Discuss proper portion sizes for moms and kids for each food group. Pass around portion visual aids. Pair up moms and have the teams each create an ingredient for the tacos (peppers and onions, beef, fish, black beans, salsa, and Greek yogurt). Set up the prepared ingredients buffet style with different size scoops/spoons in front. Invite the kids downstairs and have them practice their table rules. The moms will have to create tacos for them and their children portioning out the ingredients with the measurements that they feel is best, based on what they learned.
- **Transition:** While the moms are eating pass out the 3D forms and 3x5 cards. Have them mark on the back of the 3D papers what portions they used for their tacos

#### V. **Closure:** Everyone helps clean up

### **Modifications/Accommodations**

In a couple of weeks this lesson will be summarized with the kids. We will ask them how they enjoyed the Mexican food, and if they felt full after they had their tacos. We will re-use the portion models and demonstrate what appropriate portions for them are. The children will then engage in making their own “tacos”. They will follow step-by-step instructions to build each later of their taco and will have to scoop out the correct portion into their taco.

Needed: portion model, measuring cups, hard taco shells, plastic bags, uncooked rice, uncooked beans, chopped lettuce, shredded paper, dried lentils.

### **Assessment**

We will informally assess as we watch the mothers portion out their taco ingredients for themselves and their kids. We will formally assessment what they have learned via the portions that they record on their 3D papers.

# Lesson Plan

## Context

**Title:** Mexican Measurements: Kids

**Date:** 10-13-2015

**Time Allocation:** 45 min

**Instructional Objective:** After an overview of Mexican culture and a guided explanation of measuring with fractions, students will be able to follow a recipe and create their own “taco” using the correct portions of ingredients.

### Rationale ~ Why Teach This Lesson??

This lesson is designed to reflect the mom’s lesson from the previous week on Mexican culture and portion control, but emphasizing the mathematical concept of fractions so that students can get a good handle on them now and not face the struggle their mom’s currently face. Likewise, if the kids begin to learn now how to portion healthy amounts for themselves, it will become a habit in their lives. Finally, it is important for children in today’s society to develop a broad schema for different cultures. Our previous lessons revealed that these students know very little about the worlds around them. Learning about Mexico is especially important as Hispanic culture has a growing impact on American society.

### Procedure

**Materials:** cd of Mexican music, cd player, slips of paper with facts about Mexican culture written on them, tape, globe, measuring cups, dry rice, dry beans, dry lentils, hard taco shells, baggies, shredded yellow paper, white board and markers, piñata, filling for piñata (small toys and candy)

**References:** <http://www.donquijote.org/culture/mexico/society/customs/traditional-mexican-games>  
<http://www.livescience.com/38647-mexican-culture.html>

### Description:

#### I. Introduction

- **Time: 5 min**
- **Explanation:** Have all the students gather on the center rug and ask them what they remember from last week. What did they eat? What country was that food from? Introduce Mexico.

#### II. Activity 1: “Stealing the Sombrero” Traditional Mexican Game

- **Instructional Method:** Game/Lecture
- **Time:** 15 min
- **Domain:** Psychomotor, Cognitive
- **Grouping:** Whole Group
- **Explanation:** Explain to the students they are going to play a game children in Mexico play and learn some more about life in Mexico. With one piece of tape, attach a slip of paper to each student’s back. When the music starts allow them to run around and try to pull papers of the others’ backs. When the music is paused, anyone who has lost their paper must take it back and have a seat. This will continue until only one student remains. Go through each student’s paper. Have them read the statement about Mexico and discuss them with the students, paying close attention to the food and health aspects.
- **Transition:** Explain that part of making every day Mexican foods like rice and beans requires measuring and knowing how to **portion**

#### III. Activity 2: Fraction Measuring Relay

- **Instructional Method:** Interactive Game
- **Time: 10 min**

- **Domain:** Psychomotor
- **Grouping:** 2 teams
- **Explanation:** Explain to students that when you cook, measuring cups are used. Measuring cups are commonly divided into **fractions**. Explain the idea of  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and 1 whole. Have students line up in two teams, with the first player standing at a table with a bowl of dry rice and beans and measuring cups. The first player must scoop quarter cups of rice and beans into the  $\frac{1}{2}$  cup until it is full. They must yell out how many fit into the  $\frac{1}{2}$  cup and then run to the end of the line. The next player must dump the  $\frac{1}{2}$  cups into the cup until it is full, yell out how many it took to fill it, and then run to the back of the line. The next player will dump the one-cup into an empty bowl. Next, the  $\frac{1}{4}$  cup will be dumped into the cup. The next player will dump that cup out. Repeat this sequence until the original bowl is empty. Discuss the answers the children gave.
- **Transition:** Now that everyone is great at measuring, let's go make our own tacos!

#### IV. **Activity 3: Taco Making/Portion Activity**

- **Instructional Method:** Interactive Activity
- **Time:** 15 min
- **Domain:** Psychomotor and Cognitive
- **Grouping:** Individual work
- **Explanation:** Give each student a hard taco shell with a plastic bag fit inside it. On the whiteboard have the taco recipe written: 1 cup rice and beans ( $\frac{1}{2}$  c rice,  $\frac{1}{2}$  c beans),  $\frac{1}{2}$  cup meat, and  $\frac{1}{4}$  cup cheese, and as much tomatoes and lettuce as you want! The children will form lines on either side of the table to create their tacos. When they are finished they can present their tacos to the teachers. If there is time, ask students if they can add all of the ingredients together. How many cups is that? Ask students what the protein is in the taco. What is the grain? What is the fat? What about veggies? What else could you add to your taco? Everyone helps clean up.
- **Transition:** A Mexican fiesta is not complete without a piñata!

#### V. **Closure:** The students will take turns beating the piñata until it breaks open, and they will all receive fruit gummies and small Mexican toys and instruments.

### **Modifications/Accommodations**

The 4-5 year olds students may need assistance reading the facts on their papers during activity one. The questions asked during the taco challenge will be modified according to students' abilities. The 5<sup>th</sup> graders, for instance, may be asked to add all of the ingredients' measurements together, while the younger students may simply be asked to follow the directions using the measurements given.

During the relay race, younger students will receive step-by-step instruction during their turns.

### **Assessment**

The relay race game will serve as the main assessment for students, and the taco making simulation will allow us to assess their ability to follow directions that include fractions.

### **Phrases for Activity 1**

Mexico is in North America

In Mexico, they eat a lot of corn, rice, and beans

Mexican food is often very spicy, including many tomatoes and chilies

It is very warm in Mexico, and does not get much colder than 60 degrees

In Mexico, people are more relaxed and take a big break in the middle of the day called a siesta

Common sports in Mexico include soccer and bullfighting

In Mexico, the people speak Spanish

Mexico is full of deserts, mountains, and canyons

In Mexico, *Mariachi* music is played which has trumpets, violins, and guitars.

In Mexico, families are important! It is your duty and responsibility to respect family members

The main type of bread in Mexico is the *tortilla*

Avocadoes are commonly eaten in Mexico in a dish known as *guacamole*

Common fruits in Mexico are mangos, bananas, papaya, and melon

In the U.S we eat sandwiches. In Mexico they eat enchiladas, burritos, quesadillas, and tacos.

# Lesson Plan

## Context

**Title:** Healthy Habit Hunting

**Date:** 10-21-15

**Time Allocation:** 60 min

**Instructional Objective:** After completing a scavenger hunt for healthy lifestyle habits, and receiving explanation for each one, moms will construct their own 3X5 take home cards using the habits they need to work on most.

## Rationale ~ Why Teach This Lesson??

Learning cannot only be cognitive. This lesson incorporates the cognitive, affective, and psychomotor domains, allowing the moms to learn in a personal, active, and fun way. Also this lesson will help moms maintain healthy habits because they are in control of which habits they choose to practice.

## Procedure

**Materials:** 5 healthy treats: carrots, dark chocolate kisses, nuts, grapes, and popcorn, 5 treat bowls, 15 notecards with healthy habits written on them, 15 note cards with clues, 15 envelopes, 3D forms, and blank 3 X 5 take home cards

### References:

### Description:

#### I. Introduction

- **Time:** 5 min
- **Explanation:** Split girls into three teams and give rules for the healthy habit hunt.

#### II. Activity 1: Scavenger hunt

- **Instructional Method:** Group game
- **Time:** 15 min
- **Domain:** Psychomotor
- **Grouping:** Randomly selected three groups
- **Explanation:** Give each group an envelope to begin. Each envelope will have one healthy habit and one clue to the next location. Moms will travel around the building collecting habits and snacks.
- **Transition:** When all moms gather back in main room, begin explaining the habits

#### III. Activity 2: Explanation

- **Instructional Method:** Group Discussion
- **Time:** 20 minutes
- **Domain:** Cognitive
- **Grouping:** Whole Group
- **Explanation:** Go through each habit, having the moms explain to each other why they are so important, offering additional information and comments when necessary.

#### Tips:

1. **Stay Hydrated: drink 8 cups of water a day!**
2. **Do not drink your calories**
3. **Eat three times every day**
4. **Set a good example for your kids**
5. **Make one mealtime a day a family event**
6. **Pay attention to why you are eating**
7. **You cannot eat what you don't have**
8. **Grocery shop on a full stomach with a plan in hand**
9. **No food is a "no" food**
10. **Set a time in the day to stop eating**

11. Find a partner in pursuit of healthy living
12. Try to incorporate more activity into your life
13. Prepare one more meal a week than you normally do
14. Make a Pinterest board of healthy recipes and try one new recipe a week
15. Keep a positive attitude towards healthy foods when interacting with your kids

- **Transition:** Once each tip has been discussed, pass out 3X5 cards
- IV. Activity 3:** Personal 3 X 5s
- **Instructional Method:** Written list
  - **Time:** 10 min
  - **Domain:** Affective
  - **Grouping:** individual work
  - **Explanation:** After passing out note cards, instruct moms to pick the habits that apply most to them and write their own 5 tips for the week.
  - **Transition:** Once all are finished, pass out the 3D forms
- V. Closure:** Encourage moms to share their success on the Facebook page.

### **Modifications/Accommodations**

A smaller version of this scavenger hunt will be given, using 6 habits and having each child choose one to work on. Each child will write their own note card and have their mom sign it when they have achieved their goal. Tips:

1. Drink 3 glasses of water a day
2. Eat two vegetables a day
3. Try a new food
4. Sit at the table with your family for a meal
5. Have a happy attitude about eating healthy foods
6. Help prepare a meal with your mom and eat it together

### **Assessment**

The groups' discussion will serve as an informal assessment to see if the moms are able to apply what they are learning, and the 3D slips will allow us to formally assess what they are learning.

# Lesson Plan

## Context

**Title:** Healthy Habit Hunting

**Date:** 11-3-15

**Time Allocation:** 40 min

**Instructional Objective:** After completing a scavenger hunt for healthy lifestyle habits, and receiving explanation for each one, students will decorate a notecard containing one tip they want to work on and have a parent sign it upon completion.

## Rationale ~ Why Teach This Lesson??

Learning cannot only be cognitive. This lesson incorporates the cognitive, affective, and psychomotor domains, allowing the kids to learn in a personal, active, and fun way. Letting students control parts of their learning is essential to their engagement, which is why students choose the healthy habit they want to work on. Then, they are allowed to express their creativity in decorating the notecard with the tip on it, hopefully increasing its value in their lives.

## Procedure

**Materials:** 3 healthy treats: carrots, dark chocolate kisses, and grapes, 6 notecards with healthy habits written on them, 6 notecards with clues, 6 envelopes, blank 4x6 note cards, decorating supplies

**References:**

**Description:**

### I. Introduction

- **Time:** 5 min
- **Explanation:** Split kids into two teams and give rules for the healthy habit hunt.

### II. Activity 1: Scavenger hunt

- **Instructional Method:** Group game
- **Time:** 10 min
- **Domain:** Psychomotor
- **Grouping:** Randomly selected 2 groups
- **Explanation:** Give each group an envelope to begin. Each envelope will have one healthy habit and one clue to the next location. In their groups and with their leaders, students will travel around the upstairs area of First Glance, solving the clues and collecting snacks at each stop.

1. For a snack that's sweet go take a seat in the chair that spins in the air

2. It's so fun to bake, it's so fun to cook; you'll find your next snack in the kitchen, go look!

3. Your next snack is tiny and juicy and sweet, quick run through the gym to find your next treat!

- **Transition:** When all kids gather back in main room, begin explaining the habits

### III. Activity 2: Explanation/Pictionary

- **Instructional Method:** Group Discussion
- **Time:** 10 minutes
- **Domain:** Cognitive
- **Grouping:** Whole Group
- **Explanation:** The instructor will begin to draw one of the clues on the board. Students can yell out the hint if they think they know it! Go through each habit, having the students share why each is so important, offering additional information and comments when necessary. Write each habit on the white board next to the picture so all the students can see.

Tips:

1. Drink 3 glasses of water a day (draw 3 glasses)
2. Eat two vegetables a day (draw carrot and broccoli)
3. Try a new food (draw a plate with a question mark)
4. Sit at the table with your family for a meal (draw family at table)
5. Have a happy attitude about eating healthy foods (draw smiley face with a plate)
6. Help prepare a meal with your mom and eat it together (draw mom and daughter with chef hats, mixing bowl, and spoon)

- **Transition:** Once each tip has been discussed, pass out the card stock

**IV. Activity 3: Personal Note Cards**

- **Instructional Method:** Designing and writing
- **Time:** 10 min
- **Domain:** Affective
- **Grouping:** Individual work
- **Explanation:** After passing out note cards, instruct children to pick one habit they think they could do at home. Help them write it on their notecards and allow them to decorate as they wish! Tell them if they complete their challenges, have a parent sign their cards, and bring them back the next week, they will get a prize!
- **Transition:** Once all are finished, make sure their name and a place for a parent's signature is on the card.

**V. Closure: Clean up and enjoy more carrots, grapes, and dark chocolate**

**Modifications/Accommodations**

There are many young students in Tiny Glancers. These students will need additional support throughout the scavenger hunt, reading the clues and then later writing out their note cards.

**Assessment**

The group's discussion will serve as an informal assessment to see if the students are able to apply what they are learning, and the note cards will allow us to formally assess what they are learning. If they bring back the note cards with their parent's signature, we will know they are practicing what they are learning at home!



# Lesson Plan

## Context

**Title:** Knowledge and Noodles

**Date:** 11-11-15

**Time Allocation:** 2 hours

**Instructional Objective:** After a discussion on Italian food culture, moms will cook a group pasta dinner and be able to calculate the price their meal cost per person as well as what it would cost for their family.

## Rationale ~ Why Teach This Lesson??

This lesson takes a cuisine most everyone loves- Italian- and breaks down the specifics to demonstrate how it can still be enjoyed in a healthy manner. This lesson will also enhance the moms' reading and math skills. The menu activity will introduce them to many unknown words and the portion pricing activity will give them practice in a skill that is essential in a real-world setting.

## Procedure

**Materials:** sample menus, whiteboard, markers, pasta and sauce ingredients, recipe cards, 3x5 cards and 3D slips.

**References:** <http://www.discoveritalianfood.com/italian-food-culture.html>  
[http://www.tripadvisor.com/Restaurant\\_Review-g34705-d2570388-Reviews-Made\\_In\\_Italy-Venice\\_Florida.html](http://www.tripadvisor.com/Restaurant_Review-g34705-d2570388-Reviews-Made_In_Italy-Venice_Florida.html)

### Description:

#### I. Introduction

- **Time:** 5 min
- **Explanation:** Ask how previous week went and add up points

#### II. Activity 1: Learn about Food Culture

- **Instructional Method:** Lecture
- **Time:** 15 min
- **Domain:** Cognitive
- **Grouping:** Whole Group
- **Explanation:** Eating in Italy is linked with joy, family, and quality time. Italian culture values spending time on meals and often meal time lasts for hours and hours. Lunch is the main meal of the day, and dinner is eaten much later in the day. They also eat their meals in many courses, very SLOWLY! The first course "antipasto" is usually an assortment of olives, cheeses, and cured meats like salami and prosciutto. Then they have "primo" plate which is always pasta and then some risotto or soup, "minestrone." The "secondo" course centers around a meat or fish and some side dishes. The meal may end with some fruit or cheese, but they save cakes or pastries for a later snack. Meat based dishes do NOT go with pasta and "pasta and meatballs" is not Italian. Give brief history of spaghetti and meatballs, explaining how it came about because people were trying to eat cheap!
- **Transition:** So we see that the Italian way of life centers on mealtime and good foods, but what exactly do they eat, and what is healthy and what is not?

#### III. Activity 2: Sample Menu and Mangia! Game

- **Instructional Method:** Interactive Discussion
- **Time:** 15 min
- **Domain:** Cognitive, Affective
- **Grouping:** Whole Group
- **Explanation:** Pass out the sample menus from an Italian restaurant. Go around the room and have the first girl choose what may be a healthy choice from the antipasti

section that she may like to try. Have the next girl choose an option that would not be a healthy choice. Continue on through the “primo,” and “secondi” courses. Encourage girls to ask what items are, explain why they are healthy or not. Offer explanations and guidance when necessary. While the discussion is occurring, keep a white board with two columns at the front of the room. At the top of one column, write “mangia” and write “No, grazi” at the top of the other. Create a list of healthy choices under the first column and foods to avoid under the latter.

- **Transition:** Point out at the end of the menu there are several different sauces to choose from. Sauces can be the “make it or break it” when it comes to healthy eating. Today we are going to make pasta and try three different healthy sauces.

#### IV. **Activity 3: Pasta and Sauce**

- **Instructional Method:** Interactive Learning
- **Time:** 1 hour 25 min
- **Domain:** Psychomotor
- **Grouping:** Three groups
- **Explanation:** Have the recipe for each sauce yielding 4 servings written on the whiteboard. Explain that pasta is a great idea when it is time to feed a lot of people, and being able to expand a recipe is a useful skill. Split the moms into three groups and assign them each a sauce: avocado pesto, veggie marinara, or Alfredo. Have one group rewrite their recipe for 8 people, one group convert the recipe to feed 12, and have the final group determine the amount of each ingredient needed for 2 servings. After this is completed, check their work. Then proceed to cook! Set the table, and invite the kids down to eat with their family.
- **Transition:** Everyone cleans up

#### V. **Closure:** Pass out 3D forms and 3x5 tip cards

### **Modifications/Accommodations**

There will be no children’s version of this lesson.

### **Assessment**

The recipe card converted ingredient amounts will serve as the formal assessment. We will informally assess their knowledge of what is healthy on a traditional Italian menu as we play the “Mangia!” game.

# Lesson Plan

## Context

**Title:** Meatless in the Middle East

**Date:** 11-17-15

**Time Allocation:** 2 hours

**Instructional Objective:** After an interactive discussion on the culture and eating habits of the Middle East, the moms will be able to prepare a meatless meal for themselves and their children and demonstrate the proper ratios in creating a complete protein without using meat.

## Rationale ~ Why Teach This Lesson??

America as a nation consumes more meat than most other countries around the world. This lesson will discuss a culture that uses other protein sources to create balanced meals. By having the appropriate ratio of beans to rice this recipe will provide as much protein as if meat was included. It will allow the moms to practice basic math skills while giving them resources to cook complete meals at a very low cost.

## Procedure

**Materials:** white board, markers, handout of Middle Eastern foods, pieces of paper with dishes written on them, ingredients, kitchen, cooking utensils, 3x5 cards, 3D slips

**References:**

**Description:**

### I. Introduction

- **Time:** 5 min
- **Explanation:** Ask how previous week went and add up points

### II. Activity 1: Middle Eastern Food Culture

- **Instructional Method:** Lecture
- **Time:** 15 min
- **Domain:** Cognitive
- **Grouping:** Whole Group
- **Explanation:** In Middle Eastern culture, food brings people together, literally. Meal times are about community. Usually meals are served in one big bowl, and participants eat out of that bowl with their hands or using pita bread as a scooper. Hospitality is central to Middle Eastern culture. Anytime friends or family visit each other, the host prepares impressive feasts to welcome guests. Share example of Hannah and her Saudi Arabian friend. The Middle Eastern or Mediterranean diet centers on larger portions of vegetables and meats and smaller portions of grains. There are not many fats, and those that are used, like olive oil and nuts, are a much healthier choice. There are also not a lot of fried foods, but many baked and grilled items. Pork is never used, and leaner cuts of meat and beans and lentils are used for protein.
- **Transition:** Most Middle Eastern dishes have healthy elements, but they can be hard to say and identify! Just because a food has a different name, however, does not mean it is not delicious!

### III. Activity 2: Guess the food game

- **Instructional Method:** Interactive Discussion/Game
- **Time:** 15 min
- **Domain:** Cognitive/ Affective
- **Grouping:** Partners/Whole Group
- **Explanation:** Have names of traditional Middle Eastern foods and a description of them on a handout. Pass one out to each mom. Pair up the moms and give each one a small piece of paper with one of the foods written on it to stick to her head. With their partner and using their guides, have the moms ask yes or no questions to each other to

try to figure out what food they are. From the descriptions, have moms assess whether or not their foods are healthy. Come together as a group and discuss.

**Foods:** sesame seeds, pita, honey, chickpeas, olive oil, olives, hummus, shawarma, falafel, baklava, Tabouli, kibbeh, baba gannouj, shish kebab, fatayer, grape leaves

**Transition:** While there are many chicken, beef, and lamb dishes in the Middle East, vegetarian dishes are very common and popular as well. A dish of rice and beans topped with yogurt serves as a cheap way to make a meal that is filling and low in fat while still tasting authentically Mediterranean.

**IV. Activity 3:**

- **Instructional Method:** Interactive Learning

- **Time:** 1 hour 25 min

Your bases protein wise and putting enough beans in your rice and enough peanut butter on your toast, etc. Explain to the moms how to calculate how many grams of protein they need every day, and have them record it on their 3d forms, which will be recorded before the food is made. Break up into groups and prepare the meal. When it is prepared have the moms go get their kids and sit down for family dinner.

**Transition:** While the moms are eating, pass out 3X5 tips.

**V. Closure:** Everybody cleans up!

### **Modifications/Accommodations**

Due to the layout of our unit plan, there will be no version of this lesson designed for small children.

### **Assessment**

The protein calculation will serve as a formal assessment for this lesson. We will informally assess the moms' knowledge as they conduct mealtime with their families.

# Lesson Plan

## Context

**Title:** Penny Pinching Planning

**Date:** 12-1-15

**Time Allocation:** 1.5 hours

**Instructional Objective:** After being split into groups, given a \$25 dollar allowance, and brought to a grocery store, moms will compete to come up with and purchase ingredients for the healthiest, cheapest, most diverse dinner.

## Rationale ~ Why Teach This Lesson??

This lesson will let provide information on what the moms have actually been learning, and requires them to implement all the previous lessons. Points will be awarded for the meal with the lowest sodium, fat, and sugar, as well as the highest protein and most incorporated vegetables. These area all elements of a healthy diet we have stressed with girls. Math will still be involved since the points are given for the cheapest meal. Moms also need to plan their meal for four, so adjustments to ingredients might be needed. Finally, bonus points will be given for “ethnic flair” or trying new foods in the meal.

## Procedure

**Materials:** money for winning group, 3X5 cards, and 3D forms

**References:**

**Description:**

### I. Introduction

- **Time:** 5 min
- **Explanation:** Ask moms how week went, rally points from previous week.

### II. Activity 1: Explanation of Procedure

- **Instructional Method:** Lecture
- **Time:** 15 min
- **Domain:** Cognitive
- **Grouping:** Whole Group
- **Explanation:** Begin by giving moms more details about the upcoming potluck and answer questions they may have. Then, introduce grocery store challenge. Split moms into groups of two or three. Explain that each group has to plan and purchase the ingredients for dinner for a family of four. Points will be awarded for a variety of categories, but the winning team should have the healthiest and cheapest meal. Encourage moms to think all the way back through previous lesson and the concepts in them when planning their meals. During the car ride to the store, have the moms brainstorm and prepare a list of ingredients. Items that they typically have at home (i.e. butter, salt, etc.) can be crossed off.
- **Transition:** Get in cars and go to Acme

### III. Activity 2: Shopping

- **Instructional Method:** Interactive/Collaboration
- **Time:** 15 min
- **Domain:** Psychomotor, Affective, Cognitive
- **Grouping:** Groups of 2-3
- **Explanation:** Give moms 15 minutes to fill their shopping carts. As they check ingredients off their list, remind them to record prices so that we can determine the cheapest meal. When all are finished, have moms meet in the assigned spot to tally points
- **Transition:** Once all moms have gathered, begin point calculations.

### IV. Activity 3: Awarding points

- **Instructional Method:** Discussion

- **Time:** 20 min
- **Domain:** Cognitive
- **Grouping:** Whole group
- **Explanation:** Have each group briefly explain their choices, telling why they chose their ingredients and why they are healthy, etc. Discuss the good and bad parts of each meal, and assign first, second, and third rankings for each of the categories in the scoring rubric. The members of the winning group will each get to purchase the ingredients for their meal!
- **Transition:** Purchase winning team's food and gather back in cars.

V. **Closure:** On car ride home, have moms fill out 3D forms and pass out snack

### **Modifications/Accommodations**

Already knowing most of the moms and their needs, there should be few modifications needed for this lesson.

### **Assessment**

The entire lesson serves as an informal assessment, and the scoring of the meals will help us formally assess what the moms have been learning.

#### **4. Findings**

Both the young mothers (ages 20-27) and teen mothers (ages 13-20) expressed disdain for healthy eating when asked what phrases came to mind when hearing “healthy” or “nutritious” during the initial round-room discussion. Phrases such as “yuck,” “flavorless,” and “I won’t like it” were given in response. Both groups cited poor taste, cost, and convenience as factors, which prevent healthy eating. The teen moms felt confident in their ability to cook while the young moms had little experience in the kitchen. Both groups were receptive to learning, however, expressing they were not entirely happy with what they were eating and wanted to know “everything” when it came to nutrition (Appendix A and C).

Inconsistent attendance and the entrance of new participants during any given week of the program made it difficult to track progress of individuals throughout the unit. The most consistent attendees only made it to six of the eight lessons, and this was among young moms only; teen moms appeared even less frequently. The amount of points earned by the moms correlated directly with their attendance. Out of 90 possible points the highest point earners scored 45 and 34 for the Young Moms and Teen Moms respectively (see Appendix E).

When the program was complete, the moms testified to an increased awareness when it came to healthy eating and living. One of most common areas of gained knowledge was in the negative impacts of too much salt and sugar intake on the body, particularly when it came to sugar in beverages. Mothers also highlighted learning the difference between healthy and unhealthy fats. Several moms began incorporating coconut oil in place of other fats into their diets, and others tried avocado for the first

time. Moms also frequently reported surprise at the way so many vegetables could be incorporated into meals and still taste good. Finally, several food substitutions and easy home cooked recipes made their ways into the everyday lives of participants as the result of the program. Among these were Greek yogurt instead of sour cream, coconut oil instead of butter, chicken-vegetable stir-fry, and hummus. Mothers said their increased knowledge and nutritional awareness as a result of the program certainly did and would continue to influence the way they shop for and feed their children. (See Appendix C and H).

This program succeeded in increasing the nutritional knowledge and awareness of teenage and young mothers in the Kenmore neighborhood. While mothers acknowledged a shift in their habits toward their children's eating, the moms were honest in confessing that they did not experience nor did they expect much change to actually occur in their own lives. Most stated their own "laziness" and love for unhealthy treats as the reason. Time and inconvenience were also expressed as factors, which continually hinder their eating better. They stated a poorly planned and executed unit was not the reason for this, but rather their own lack of motivation.

In terms of mathematics and cultural awareness, the moms originally demonstrated very limited knowledge of the basic math needed for recipe conversion, particularly when it came to fractions. Moms could generally convert whole number measurements, but when asked to multiply or divide fractions, several mothers stated uncertainty in this area or decided not to try at all. This was more common in the teen mothers than the young mothers, and all participants demonstrated growth in this area as a result of repetitive conversion activities. In terms of cultural understanding, the mothers



possessed the most insight on Mexican and Italian food culture and the least on Chinese and Middle Eastern eating habits. They experienced several foods for the first time, including Tabouli, dates, water chestnuts, and chickpeas. After this unit they seemed more aware of the ways that different cultures eat, and demonstrated an understanding of how other countries prioritize different food groups.

In general, the mothers experienced increased interest in the lesson when cooking or competition was involved, and less interest when the lesson was more lecture focused. This reinforces the learner-focused, kinesthetic approach to teaching and learning purposed by the instructors. Furthermore, the girls regularly commented on their enjoyment of this nutrition program as compared to previous ones in which they sat through the same lectures they had received multiple times in the past.

In sum, the effects of this nutrition unit seemed to increase the knowledge and interest of the participants towards nutrition and healthy eating habits. While this new information did not clearly manifest itself regularly into the lives of participants, most experienced a shift from a pre-contemplative attitude towards nutrition to a place of contemplation, preparation, or in some cases beginning actions.

Regarding the children, the pre-test revealed a lack of knowledge in vegetable and fruit terminology as compared to less nutritious foods such as French fries and ice cream. When asked to sort plastic foods into “healthy” and “every-once-in-a-while” piles, participants mistook a red pepper for a tomato and a potato, strawberries, blueberries and an apple for grapes and a banana for an ear of corn. Cake, cookies, ice cream, macaroni and cheese, pizza, chicken nuggets with ranch, chocolate waffles, and donuts were listed as favorite foods, and when asked if he would like a salad, one participant answered, “no

ehhh . . . I want cake.” There were a few students who displayed above average nutritional knowledge, however, being able to distinguish between white and wheat bread and giving rationale for their sorting choices. These students were generally the children of First Glance leaders or young moms who are older, have multiple children, and have been in the program for years.

As with the mothers, attendance among the children varied considerably. Typically the age range of participants was 3-8 years old. The children were very receptive to the lesson on fats, proteins, and carbohydrates, and were able to categorize foods into these three sections weeks after the initial lesson. The children that demonstrated the most interest and engagement in the lessons were those who already possessed a better knowledge of nutrition.

During the cultural food lessons, the children exhibited very little geographical knowledge when it came to identifying areas such as China, Mexico, or the Middle East, and their understanding of the food cultures of these areas was only slightly better. They associated Mexico with tacos and Asia with sushi, for example, but that was about the extent of their awareness. This lack of knowledge led to the successful introduction of several new foods including water chestnuts, avocado, and hummus. While some rejected these foods, nearly all students experienced the foods, and some greatly enjoyed their new finds. Towards the end of the children's unit each student chose a challenge. These challenges ranged from helping a parent cook a healthy meal, drinking more water, to trying a new food. Six participants completed the challenge and brought back their signed challenge card to claim a prize.

Similar to the adults, the children also more actively participated in the lessons, which required competition, movement, and personal application. While the lessons were designed for 6-10 year olds, several lessons were modified to fit the age group of children who actually attended a given lesson, which was usually 3-8 years old. Lecture portions were shortened, and requirements for games were loosened, especially when it came to mathematical components. The children demonstrated increased interest in and knowledge of nutrition directly following a lesson, but no significant long-term modification in their attitudes towards healthy eating was noted.

## **5. Discussion**

The lack of long term impact this program had on the children, and even the mothers is most likely due to scheduling disruptions that prevented consistent, thorough instruction and support towards all participants. The original plan included an equal number of child and mom lessons, but the children only actually received five lessons which ended in October, while the mother's program extended into December. The final assessment date for all the participants was postponed due to a death in the community and the subsequent closing of First Glance for the holidays and snow days. The wrap up lesson was not able to be completed with the mothers until February, and because of this we combined the final lesson with our planned follow up post-test. While this allowed us to accurately determine how much information the moms retained on a long term basis, regrettably, we were not able to reinforce our key points and habits the way we initially hoped.

In a post-discussion with the mothers, they stated that our instructional approach and lessons had nothing to do with their resistance or failure to change. As we reflect on the unit however, there are several areas we feel could be changed to make this program more effective.

For the children, we wish we had more time to spend with them and that our lessons had been more repetitive. With the limited amount of time we had in their classroom we tried to pack a lot in, and in retrospect the things that they remembered best were the things that we brought up repeatedly. Similarly we could have planned more age appropriate lessons that were more impactful for them. If this program was to be done

again we would be more intentional about conducting a comparative follow up activity to more accurately measure growth and improvement.

Since we spent more time with the moms, we have more potential changes to make to that portion of the unit. First, we would have thoroughly tested the recipes and prepared recipe cards. Chaos occurred when there were upwards of ten women in the kitchen. This chaos could have been diminished if we had set roles and tasks prior to the start of the lesson and meal preparation would have been completed in a timely manner and made the nights flow smoothly. In an ideal program we would have a longer unit plan that would allow us more time with the girls. With a few more weeks we could have continued working with them on their math skills and also simplified the lessons so that we didn't have to cover so many topics in one week. As our time with the moms was limited we wished that we could have interacted with them outside of lessons, either at First Glance or on the social media platforms that the girls interact on.

Another area where we really struggled was the reward/point system. We knew these girls needed an extrinsic motivator to keep them interested in growing and improving, however, we should have had each mother pick one personal goal and rewarded them according to the progress they made toward their goal. This may have created a clearer point system, and long lasting habit changes. Finally, we would have liked to create a recipe book for each of the moms including the recipes they tried during the unit and space for them to add their own recipes over time. The moms expressed an interest in this and we think it would be a beneficial addition to the program.

There are areas for improvement in any study, and significant thought was given to ways we could have made our unit better suited to our target group. In the analysis of the effectiveness of our program we highlighted specific elements that were particularly successful, and should be repeated in the event that this study is replicated.

First, the instructional approach implemented in our lesson plans was extremely effective in encouraging participation in each lesson. Each lesson had a cognitive, affective, and psychomotor component, and the moms responded positively. We purposefully incorporated light, fun, and almost silly activities into our meetings to lessen the dryness and negativity nutrition lessons often include. A notable example of this was the scavenger hunt activity in which the mothers demonstrated notably higher levels of enjoyment and engagement. They had to physically race around the building, collecting clues and healthy habit tips which were then discussed as a group. Finally, the mothers composed a list of the tips they felt were most applicable to their individual lives and focused on those specific habits the following week. Our attention to and intentional avoidance of the typical adult lesson plan greatly contributed to our program's positive impact. One of the most common reflections among the participants was our unit's superiority to previous nutrition programs they have experienced. Other components we thought were particularly beneficial to our unit were the "3D" assessments after each lesson as well as the recipes we decided to teach. Also, the final kid's challenge, which targeted one specific goal per student, went extremely well, and should have been repeated with the mothers, given the opportunity.

In conclusion, we received only positive feedback from both the participants of First Glance and their leadership. The moms were sad to see us go and asked if we would

return to visit. We witnessed growth in the knowledge and inquiry among most of the moms as well as a few notable changes in the lifestyles of the mothers. Still, we see the areas which we could have improved and possibly made a longer lasting impact on the lives of teenage and young mothers in the Kenmore area. We will never truly know the long term effect this nutrition program had for the mothers of First Glance and their children, but we hope that our impact, however small it was, planted a seed of change that will continue to take root and grow over time.

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## **Appendix A: Pre-test Results**

### **Schooling Level- highest or current:**

Middle school: **0**    High school: **9**    GED: **3**    College: **4**

### **Are you employed? Yes: **5**    No: **11****

### **How many children do you have?**

1 child: **9**    2 children: **4**    3 children: **2**    4 children: **2**

### **Do you frequently attend Teen Mom/Young Mom programs?**

Yes: **15**                      No: **1**

### **Would you like to learn about healthy eating for you and your kid(s)?**

Yes: **13**                      No: **3**

### **Where do you get most of your food?**

Save-A-Lot: **4**    Acme: **6**    Aldi: **3**    Market District: **1**    Walmart: **1**    Giant Eagle: **3**

### **Do you use WIC coupons or other government assistance to buy food?**

Yes: **15**                      No: **1**

**If yes, which?**    WIC: **12**            SNAP: **10**

### **Do you cook?**

Yes: **13**                      No: **3**

### **Where do you eat most of your meals?**

Home: **16**            At a restaurant: **2**            In the car: **0**                      On the bus: **2**

### **If you have school-aged children, do you pack their lunches?**

Yes: **1**                      No: **9**                      Sometimes: **2**

### **Do you think you understand what are healthy vs. un-healthy foods?**

Yes: **14**                      No: **1**                      Sort of: **1**

**Have you ever been/are you currently on a diet?**

Yes: 11

No: 9

**What is the hardest part about getting your kids to eat healthy?**

I don't have problems; my daughter loves junk; making it look appetizing; the fact that he has never been forced to eat differently so he is used to the bad things; they don't like smelly foods otherwise they eat anything- veggies, fruit, fish; they like junk and pop better than healthy stuff, as do I; finding fun ways to use them [veggies]; the cost- my kids are good eaters and will eat a lot; my oldest hates vegetables; eating vegetables; just trying her with healthy foods; I'm not home to prep the meals and feed them; just for her to sit there and actually eat.

**What is the hardest part of eating healthy yourself?**

So many good tasting unhealthy foods; husband; I don't like some foods; always on the go; I like chocolate and sweets; I am addicted to sweets and chocolate; timing busy schedule (convenience foods on the go); smells; I love sugar-pop, sweets, cakes, candy; I'm very picky; the cost and most taste funny; healthy foods never taste as good and they're always more expensive; doesn't taste as good; watching what's good for me; not creative enough to prep early meals; time- I work most days so it's hard to find the time.

**What would you like to learn about related to food, eating, and/or cooking?**

How to cook; good tasting foods; tasty healthy food; good tasting foods; hiding vegetables; low sodium choices, portions, good fats, vitamins; seasoning food; how I can eat sweet tasting stuff without the sugar and the low/no-cal sweeteners are gross; new recipes; anything and everything that will help us be healthier; how to make it yummy;

anything that's healthy and can help me lose weight; almost everything; how to prepare it before hand so that it's not a time strain.

**What is your favorite food?**

Taco Bell and Chinese; everything; pizza; pizza; pizza; pulled pork; shrimp/seafood; sweet peas (fresh or frozen); fruit-sweets; Rocco's pizza and steak; Mexican; steak; chicken; alfredo; fast food; alfredo pasta; cucumbers.

**If you could only eat one style of food for the rest of your life, what would it be?**

Chinese; Italian; all; Italian; Italian; seafood; Chinese; Chinese; American; Italian; Chinese; Chinese; Italian; Soul food; Italian; Chinese.

**Do you look at the nutrition labels on the foods you eat?**

Yes: **8**

No: **6**

Sometimes: **2**

## **Appendix B: Post-test Results**

**In week 1, we talked about sugar, fat, and salt. What's one thing you remember about the negative impact too much of these nutrients have on your body?**

Salt causes water weight gain and sugar causes diabetes; fats turn into weight I don't want; makes you gain weight; you retain too much of it; fat turned into weight; salt makes your heart work tons harder, sugar is ok in moderation, and fat clogs arteries; how much sugar was in the Snapple; I remember that you think about that there is not much sugar in something but there is really a lot; sugar can give you diabetes, salt can give you a heart attack.

**Fat or Fiction? When you don't eat, your body burns fat instead of storing it.**

Fat: **0**    Fiction: **9**

**What are some of the healthiest choices of fat to eat?**

Don't know; eat unsaturated fat instead; unsaturated; unsaturated fat; eat unsaturated; butter, milk, and cheese; coconut oil; vegetables.

**In week 2, we made stir-fry and talked about Asian food culture. What food groups does the Asian diet focus mostly on?**

a) Whole grains: **0**    b) Fish: **1**    c) Vegetables: **0**    d) Meat: **8**

**Week 3's lesson talked about healthy portion sizes. A healthy portion of meat is about the size of:**

a) Your hand: **0** b) the palm of your hand: **8**

c) A cd case: **1** d) ¼ of your plate: **0**

**Is what you get on your plate at a restaurant one portion** Yes: **1**    No: **8**

**About how much water should you be drinking a day?**

a) 8 cups: **6**   b) ½ your body weight in ounces of water: **3**

c) Your weight in ounces: **0**   d) until you are not thirsty anymore: **0**

**Do you feel comfortable changing the measurements in recipe to serve the number of people you need to feed?   Yes: **6**      No: **3****

**Besides meat, what are some ways to get protein in your diet?**

a) Rice and beans: **7**      b) Peas and zucchini: **3**   c) yogurt: **4**

d) Peanut butter and toast: **7**   e) Rice and vegetables: **4**

**10. We talked a lot about other countries, their cultures, and the way they eat.**

**What is one part of these food cultures you liked and feel like should be part of your healthy lifestyle?**

More rice; more water and more vegetable; Asian, more vegetables; I don't know; high amount of rice and veggies Asians eat, low sweets- wish I could get used to that; Mexican fish tacos.

**11. What are some things to look for when choosing healthy foods at the grocery store?**

Fats and sugar content; fats, salt, calories; the nutrients; low sodium, fat, sugar, and calories; non fat free; whole grain, less ingredients, fresh not canned or bagged; nutrition facts; sugars; how many vitamins, how much sugar, etc.

**12. What was the number one thing you learned over this unit?**

Switch veggie oil for olive oil; a lot- stir fry is awesome, Greek yogurt is great to switch for sour cream, and much more; to eat healthy with less fat; look at calories; to try and eat healthier; that portion control is the best way to lose weight- I really am gonna try!; coconut oil, salt; using coconut oil.

## **Appendix C: Discussion Questions and Answers**

### **Pre Unit Discussion Questions and Answers**

**What comes to mind when you hear the words “healthy” or “nutritious”?**

**Teen Moms:** yuck; flavorless

**Young Moms:** fruits and veggies; My Plate; cardboard; tofu; yuck; cautious to try foods; I won't like it but I should eat it; 'diet' foods

**What do you know about healthy eating?**

**Teen Moms:** what mom cooks; low-carb; turkey burgers instead of beef

**Young Moms:** chicken instead of beef; read labels; low sodium and low carb; iron is important; WIC teaches you nothing; low iron makes you tired; your bones need iron; there's iron in beans; portion control; toddlers need a lot of water

**Can you eat healthy on a budget?**

**Teen Moms:** No; fresh is more expensive and doesn't go as far

**Young Moms:** Fresh is expensive; buying ingredients and making from scratch is cheaper

**What stops you from eating healthfully?**

**Teen Moms:** bad stuff tastes better; what's in house/available; accessibility; convenience; having to eat before bed; eating on the go; loving salty foods; not enough time

**Young Moms:** price; time; poor portion control; taste; eats well in front of kids and binges when alone; not in charge of foods served at school

**Do you think eating well is important for you and your children?**

**Teen Moms:** Yes; will be cheaper in the long term; can prevent cavities

**Young Moms:** Yes; important prevent obesity; active kids need fuel

**What do you want to know about how to eat healthy?**

**Teen Moms:** everything; what your body needs; how bad food affects the body

**Young Moms:** everything; how to cook healthy on a budget

**Do you have any cooking experience?**

**Teen Moms:** Yes

**Young Moms:** Bad experiences; better at baking



## **Post Unit Discussion Questions and Answers**

**Has your approach to trying new foods changed?**

**Teen Moms:** no; yes

**Young Moms:** olive oil doesn't have a taste when you cook with it

**How has what you have learned changed how/what you feed yourself and your kids?**

**Teen Moms:** didn't change habits for self, but now reading labels when buying foods for son- not buying foods with higher sugars; using less salt; using coconut oil instead of butter when cooking

**Young Moms:** less chocolate milk after seeing how much sugar is in it; less fatty foods; I'm going to try

**Favorite memory? Least favorite memory?**

**Teen Moms:** Least favorite- roasted chickpeas; Favorite- stir-fry; fish tacos; grocery store game

**Young Moms:** Favorite- grocery store game

**Now when you hear the words "healthy" or "nutritious" what comes to your mind?**

**Anything different?**

**Teen Moms:** used to think 'who cares?'; being skinny; fruits and veggies

**Young Moms:** losing weight; time consuming; stop eating sweets; no pop and no eating out; dread; eating fruits and veggies will make you lose weight

**Do you think you will continue to use what you have learned long-term?**

**Teen Moms:** Yes; my kids are worth it

**Young Moms:** I don't always use it, but your words are in my head

**Have you made eating healthy and taking care of yourself more of a priority since starting this unit?**

**Teen Moms:** No; I like my junk; laziness; unsupportive home environment

**Young Moms:** as much as I can; depends; replaced pasta with spaghetti squash; now shops for quality not just quantity, especially when feeding my sister with T2DM; I want to stop drinking pop

## Appendix D

*Jun 30, 2015*

*Tuesday was our first day at first glance. It was just an introductory session. When we got there at 4:15, the teen moms were just starting their dinner of pizza and cake. Allison and I went upstairs to Tiny Glancers with our bag of toy food and a notebook. We sat on a rug and called kids over and asked them to play our “grocery store” game. First they told us their names, ages, and favorite foods. Main answers were cake and pizza but one girl informed us she wanted chocolate chip waffles for breakfast, mac and cheese for lunch, and steak for dinner. These kids were crazy! And adorable. They commonly confused the red bell pepper for a tomato or potato, and they had confusion with the grapes as well. They allll knew the pizza, fries, cake, cookie, and ice cream, though. Many of them thought it was “good” for them, but Allison and I wondered if it was the way we worded the question. Perhaps we should not have said good and bad, but rather healthy and not healthy or what makes you grow big and strong. We did try this with a few of the children. Also, the wheat vs. white bread was pretty humorous. The leaders’ children certainly showed the most knowledge of nutritious eating.*

*The teen mom group meeting was in an interesting experience. These girls have so much knowledge I don’t have even though they are younger than me! It is so sad, and I feel so un-relatable at times! We had fun, though, eating our Italian ice and zucchini bread and talking about foods we love or hate. Several girls expressed being very picky, so this will pose a challenge to Allison and me.*

*The young girls were intimidating, but not nearly so much as the young moms. Most of these women were older than me and had a lot of “worldly” experience. Basically it was a rough crowd, and we have our work cut out for us. I feel like these women have so much more to focus on than healthy eating, it is at the bottom of their lists. Beneath it all though, I know these are moms that care about their children and want what’s best for them. The trick will be making TASTY foods and getting them to try them! The survey results should be interesting.*

September 9, 2015

*So last night was our very first actual lesson! We had about an hour-long session with both the teen moms and young moms and then a 10-minute mini session with the Tiny Glancers. After meeting on Saturday with Allison to go over the lesson and finalize plans we realized we had to totally rework the salt demonstration. We were getting ketchup all over and the complexity of the object lesson was distracting from the take away, so we had to totally scrap it and come up with something else. I liked our new demo much better and was getting excited for our lesson!*

*The actual day of the lesson, though, I was very very abnormally tired and just had not been in the best mood all day. I walked away from the lesson feeling like it went ok, but not quite as well as I had hoped. I just am not sure the moms actually learned anything! I feel like maybe we weren't clear enough. I also am probably being hard on myself. The moms and leaders all gave us positive feedback. On the way home from the lesson, Allison and I discussed what went well, what did not, and how we might change the lesson in the future.*

*Well the first thing we noticed is how well the snack went! We brought sour patch grapes, or grapes rolled in Jell-O powder. NOT the healthiest choice, but the moms really enjoyed them and want to make them for their children. I suppose it's still better than actual sour patch candies. We also both felt the moms paid attention and participated more than we thought, even the teen moms. They readily joined discussion, but did a fairly good job of listening to the information we were sharing. The young moms had better discussion, but I personally thought the teen moms had more energy (there were actually only 2 teen moms there! Very small group this week). Actually the worst distraction was the leaders who were planning and talking and working on laptops right in the middle of our lesson, which we thought was a little rude.*

*Allison and I are especially pleased with how the sugar and salt demonstrations went. We realized these two had the most student participation. They were visual and kinesthetic and the moms seemed to glean the most from them.*

*In contrast, we felt the fat activity could have been better. I feel like we did not provide enough relevant information, they seemed to know everything we were telling them. How can we make them see it in a new light though? Cause while they may know facts about fat, it clearly is still negatively impacting their lives, and I want them to value their health! Another weak area was the assessment. After Mrs. Seher's suggestion, we tried to make it more specific, but I feel like it still kind of flopped. The moms did not seem to have any better way to communicate to their children about healthy eating than when we began. They said they would just respond to their kids asking for unhealthy snacks with phrases like "that's not healthy," "that will make you fat," and "no, because I'm the mom and I said so." Allison pointed out that perhaps because of the moms' lifestyles, they are very realistic and role-playing of any kind just doesn't come easily. They cannot seem to imagine their children posing these questions or come up with how they might respond. It was very interesting. They did not seem to think their children were old enough to understand.*

*Two other more logistic things we could have done better: 1) don't pass out snack and go over a chart at the same time. No one paid attention. Also, I don't know we should have opened with such a technical chart. 2) Don't close the lesson with such depressing stats!*

*As far as changes go, I feel like we would incorporate more kinesthetic/interactive elements into all activities. For instance, we would make the fat or fiction game more active. The moms could get up and walk to one end of the room for fat, the other for fiction. Also, we would reword some of those statements as they ended up confusing the moms. Maybe we would include more specific facts on fat and health suggestions, rather than broad principles they seemed to already know. Also, we would come up with a more engaging opening activity.*

*It was only lesson one. It was the most informative lesson and I feel like future lessons will only get better! I am still confident and excited for this unit!*

*September 16, 2015*

*Last night's lesson went sooooo well!!! We were with the Tiny Glancers most of the time, and we are both very comfortable with young children so maybe that is why we felt the instruction and response was so effective.*

*We arrived around 5:50 to do our 10-minute breakfast lesson with the teen moms, and when we got there the room was full of commotion because the moms were working on a craft and talking. Allison and I began to worry and wonder if we would be able to share with them. It was definitely not the best environment for teaching, but Allison and I ended up concluding that it was kind of a good thing because we were teaching a lesson on how to make a quick breakfast on a busy morning and we had about 10 chaotic minutes to teach it. What I am most concerned with though is how well the presentation of the point system went. I do not think the moms were really listening, and I am not sure how motivated they will be to earn points since we are unable to establish a prize at this point. The young moms were probably more engaged than the teens, however. At least we said everything we needed to, and at least they appreciated the quick breakfast ideas handout!*

*As far as the kid's lesson goes, we really could not think of much we would change! The one confusing element of the lesson was explaining "fat," "grain," and "protein" at the beginning of the lesson, but having them sort food into "fruits," "vegetables," "grains," and "proteins" at the end. I am unsure of how we could change that though, and the children still seemed to understand. I truly feel like they learned new information too. For instance, when we first mentioned fat to them, their response was very negative and they all associated fat with meat, which we found surprising. We explained to them, however, that our body does need some fat for protection and meat is a source of healthy protein and some fat. The best part of the lesson was definitely the plate/puzzle activity! It was great to guide students in choosing healthy foods. I had to explain to a student while having three fruits on her plate was healthy, she need all the food groups present. The kids really seemed to enjoy sharing about their plates when they were finished.*

*Also, I wasn't sure about the sugar activity, but Allison had students estimating and comparing numbers as well as counting them! By the end of the activity she had convinced the students to ask their moms for water instead of a sugary drink! We simply had a fun time with the kids*

*After last week, this week was a nice encouragement. We received positive feedback from last week and one of the teen moms was asking about us before we got there! They told us that most nutrition people are boring, but they actually like us! I am glad they like us, but I really hope that appreciation transfers into them actually following our tips and creating healthy habits for themselves!*

Sep 22, 2015

*Oh my, last night was . . . crazy. And a little overwhelming, and it took me the whole evening to be able to think clearly again. But when Allison and I got in the car to drive home our main take away was the following: It went well. In all the moments I felt like we were rushing around – it was a fast 4 hours! – and nothing was going quite as planned, but we sat back and really looked at it, we accomplished all of our main goals: 1) dinner was totally made by the moms and fed all the moms with some to spare (we even forgot some raw chicken in the fridge!) 2) it was served warm and family style with moms and kids sitting around tables together 3) everyone ate or at least tried the food and 4) based on the 3D worksheets we handed out, most of the moms enjoyed part of the lesson well enough that they would want to try it again or make changes in the way they eat! For example – and this really excites me! – the main take away the moms gained based on their 3D forms was that fresh vegetables can be delicious and easy to incorporate into meals and they want to try to use them more often! They also discovered that coconut oil is a healthier choice and brown rice doesn't taste much different than white. Additionally, for some moms this lesson was a success simply because they now know how to make rice or realized that stir-fry can be healthy, tasty, and quick to make. I sincerely hope they take these discoveries and use them in their daily lives!*

*The shocker of the evening and something that really saddened me was these ladies' basic math skills. I literally had to help one mother calculate  $3 \times 3$ . They had basic addition of whole numbers down, but when asked to multiply the fraction  $\frac{3}{4}$  (which one mom did not even know how to write) they all initially had blank stares. This was especially true for the teen moms. Most of the young moms did this task quickly. According to Ohio's New Learning Standards, operations with fractions should be mastered around 4<sup>th</sup> and 5<sup>th</sup> grade. How are we going to do our later lesson on budgeting a meal, when the moms had difficulty multiplying  $\frac{3}{4}$  by 6? Or even 4 by 6? Allison and I are considering just repeating the recipe conversion activity for every lesson instead of trying more advanced math work. I feel like if we can enforce fraction multiplication by the end of this semester and get the moms comfortable with it, we will have come a long way. I am also encouraged to do more basic math with the Tiny Glancers, reinforcing now what they will need as teenagers and adults!*

*Another area I want to continue emphasizing is dinner order. It got pretty chaotic last night, especially in the young mom's hour. I felt like it was harder for me because I was a little dazed from the last hour, we had a later start because the teen moms were cleaning up, and there were so many of them! Seriously, moms who never come were there, new moms were there, a bunch of leaders showed up, everyone was a little shocked! So given that, it went very well. Still, I would have loved to see a little more cooperation at the dinner tables, children eating, then waiting, then helping to clean up. I think I may have expected a little too much out of the first cooking week. I think each meal will go smoother and smoother as the moms get used to the routine. Also we are having a separate lesson for the children this coming Tuesday, in which table manners are going to be strongly emphasized!*

*Overall, I think the lecture portion went pretty well. Of course, there are always things I wish I had remembered to mention or had time to mention. In the moment though, I get a little flustered and don't want to bore anyone, and I want to make sure we*

*have enough time! I thought I did better with the teen moms. We had more discussion, but we also had more time. Allison and I were pleased with the moms' recognition of foods that were healthy and those that were not when playing the chopstick game. At least they have knowledge of what is healthy, even if they do not always eat accordingly. Got to start somewhere! It was great to give the leaders a break, and Karen and Jen were very enthusiastic about how it went, which is a big encouragement! No one seems to hate us yet, and a lot of the moms remembered to eat their breakfast and got points! Allison and I are a little regretful we did not specify what they should eat though because one mom had bagels and cream cheese every morning . . . baby steps, baby steps . . .*



Sep 29, 2015

*This week actually began to feel comfortable! I feel like the moms were excited to see us, and I actually have begun to form relationships with some of them. We were mainly with the Tiny Glancers this week, but when we did meet briefly with the moms, they were telling me all about what they made for dinner and how they actually made breakfast. One mom even attempted the stir-fry again and discovered she could make almost the entire meal using her WIC program. She spent \$9 to feed about 6 people! Another mom said she did not but pop and instead had water. Another mom we overheard telling her boyfriend that she wanted to go listen to us because we told her about the “sugar thing.” It’s comments like these that encourage us and make all the chaos seem worth it! This said, Allison and I are still a little discouraged about what the moms are eating, and how little they seem to care. For example, frequent breakfasts are bagels and cream cheese, or powdered donuts and chocolate milk. My question is, why are these foods even entering the house? One teen mom explained, that her son “wanted” a powdered donut with his peanut butter sandwich for breakfast. What?! This frustrates me because the child should not run the show! Allison and I decided we need to go over that as moms, these ladies are adults and they run the show. They can give their children choices, but choices that they have set, such as, “do you want 2 pieces of broccoli or 3?” It is hard, though, because we are not teaching a parenting class but a nutrition class. Still, I want these moms to understand they are creating poor eating habits in their children by allowing this. It makes me sad. It makes me sad that one of the moms sarcastically remarked she was trying to keep in “girlish figure” when she is dangerously obese! How can we make them understand they are seriously harming their bodies with the Cheetos, Polar pops, and sugary snacks?? After the meeting we were discussing this and realized these ladies are accustomed to eating what they can get. Often free meals and cheap meals are not the healthiest. When Allison and I offer the leftovers from our snacks the moms snatch them right up. They are free, and they are “healthy.” Several moms told Allison they did not try the stir-fry again because “it’s the end of the month,” and food stamps are used up. This is a very difficult issue to overcome. So . . . all in all we feel like we are making progress, but there is still a long way to go. The moms seem motivated, but are they motivated because they are seeing the benefits of eating healthy or are they just after points?*

*I think overall the label reading activity was well received. We were a little concerned the teen moms and their extreme fat consciousness. We do not want them to become scared of fat. Allison said they referred to anorexics as “psychos,” though, so we are not too concerned. While Allison was meeting with the moms I was cutting up apples and making peanut butter yogurt dip (which they loved!) so I was not totally in the meeting. I handled most of the kids’ lesson, however.*

*Overall, I was pleased with how it went with the Tiny Glancers There were A LOT of kids up there this week as well as 5 or 6 students from the University of Akron who were completing service learning hours. So when Allison and I first entered the room, we were a little overwhelmed. Also, we had been assuming Caitlin and Josh would be there to oversee the room and be the “honored guests” at our mock meal. We had to work with it, though! I was pretty impressed, actually with how well the kids sat, listened, and*

*participated in the activities. Even when they told us it was boring! If we repeated this lesson, I would definitely incorporate more visual and sensory supplements.*

*I was surprised at their complete lack of knowledge of the geography of Asia! They guessed that Africa, America, and Florida were all parts of Asia. They did know about China, but that was pretty much it. Other elements we put on the “K” section of the KWL chart were sushi, noodles, and different language. By the end of the lesson, when we went over what they learned --which should have been quite a bit!—three of the students said “God.” We found this hilarious, but it was a little disappointing. We decided for the next culture lesson, we would focus even more on the culture and less on nutrition aspects. On the ride home Allison and I discussed the need for better assessment of these students. I think if we were more geared towards the students the entire semester we would have more time for it, but we are mainly centered on the moms, and simply do not have the resources or time to further assess these kids.*

*On a positive note, they still remember protein, grain, and fat! They are still pretty convinced, however, that all meats are fats. This really frustrates Allison. She made an interesting point, though. She pointed out that wealthier people are very protein conscience and realizes its importance, and have the money to spend on it. People in a lower SES, however, emphasize low fat and low carb foods. They do not eat as much meat, and when they do it is often fast food, which is full of fat and should not be eaten. By the end of the lesson yesterday, the kids were finally starting to link meat with protein, which was pleasing to us.*

*Finally, I loved how into the mock meal the kids got! They all sat and waited until our new “honored guests,” the UA students joined the meal. They took turns passing the bowls and helped each other when needed. The only girls that misbehaved were the three year olds, and they were bad, grabbing food with their hands from the middle of the table and each other’s plates. They did not clean up and they were not listening. With the number of students we had, however, I think we handled it as best we could. I had fun with the kids this week. I am starting to remember names, and am excited to follow up with them in future weeks! This is hard work! We wish we had a week off just to reevaluate and figure out ways to improve what we are doing. But the course continues! Next week is Mexican cooking!*

October 7, 2015

*Hmmm last night at First Glance was mostly just ok. Nothing really bad happened, but nothing amazing either. It was waaaaay more chill than our last cooking experience, and the whole evening was comfortable, Allison and I thought. I feel like I got a first feel at what teachers feel after the excitement of the beginning of the year is over, and life settles in to the normal humdrum and teaching begins to feel average and like, "an I even doing anything significant?" Allison and I keep seeing signs of growth, and we are like "yes!" At the same time however, we are still seeing a looooot of poor lifestyle choices. For instance we both got pretty annoyed when we walked in yesterday and one of the moms was sitting around a table with her children eating a snack of Doritos, Swiss Rolls, Chocolate Mudslide Chex Mix, cheese crackers, and Kool-Aid-type beverages. Gah!! Have we accomplished anything?! It is not that it makes me mad so much as it breaks my heart because it is so unnecessary and harmful to the mom and the kids.*

*Another frustration we have is delivering the nutrition information in a way that the girls will receive and find engaging. As I watched Allison run through portion sizes for different food groups, I looked around the room and saw a bunch of girls who did not understand some of what they were hearing and did not really care to hear the rest. It is hard to blame them when we are talking about portion control though! Allison and I do not stick to the portion size all the time. The problem is, however, when you consistently overeat, and snack all day, and this is what the moms are doing, I think. But do they want to change? I am just not sure. Allison and I decided that the next time we meet to the healthy habit hunting might be a good time to kind of re-evaluate with the moms and ask them how we can better serve their needs. Do they want us to be harder with them? What exactly do they want to learn? Do they want to change? What information would be useful to them? Nutrition is so over talked about; I do not just want to be another unheard voice.*

*With all of that said, there are certainly times Allison and I realize that we ARE making a difference, however small it may seem. The girls make little comments sometimes that are total encouragements to Allison and me. For instance, one mom commented, "we've been eating so healthy since you girls came." Now, I am not sure what healthy means to them, but it is still a positive step! Another mom stopped drinking pop. We are not certain that is because of us, but we still have some influence! Also, reading their 3Ds is helping us gauge where they are at and what they are learning. We were surprised that several girls just found out this week that guacamole is made from avocado! They also mentioned adding more veggies into their diets and lower fat substitutions such as plain Greek yogurt. This week some of them expanded their knowledge of Mexican culture by learning that fish is common in Mexican cuisine. The pico de gallo was a hit! I was so pleased that several moms agreed to try it, and most of them did not hate it. The piñata was also a huge success, and the moms really seemed to enjoy it. Sometimes you just have to let adults be kids!*

*We had the ladies convert the recipe to their family size again, which is still a big obstacle for them. I sat down with one mom and step by step talked her through multiplying fractions, since she plainly told me that she did not know how and was going back to school. It still amazes me, but I was so glad she came and asked for help! Allison*

*and I are trying to think of a better assessment tool for these recipe cards because we do not want to offend the moms checking their math like schoolteachers. We do need to see where they are at, however. Allison suggested supplying the answers right after they complete the cards and have them self-check while we are in the room. For instance, we would say, "ok, here is what you should have if you are cooking for four people. Do you have that? Now here is the recipe for six people." That way we can monitor in a way that leaves the moms feeling in control and not hopefully not belittled or badgered.*

*Timing was a bit of an issue tonight. We feel, though, that we are getting better at time management overall. Last night with the self-serve taco station, however, it took exceptionally long to get through the dinner, line. When we go back to family style meals it should flow better. The kids were happy to see us when they came down for dinner! I am excited to go teach them next week. We keep moving forward, hopefully getting better and better!*

*\*I feel like if I apply myself more to learning the moms' names it will really help me. I just feel like I do not know them, and then I feel disconnected and like I should not be telling them how to restructure their lives! Allison has more background with them which I feel gives her more authority, but I do want to develop relationships with them. Getting those names may be the first step!!*

October 13, 2015

*Last night's lesson paralleled how this semester is currently going: chaotic. It was just one of those days. One might say the lesson was a fail, but I really can't because it was such a good learning experience of how teachers need to be flexible and adapt lessons in the moment. First off, the entire layout of the evening was atypical. Both teen moms and young moms met together, so all of the children were upstairs simultaneously and at a different time than normal.*

*When Allison and I entered the Tiny Glancers room, children were everywhere and the only supervision in the room was a group of service learning students from the University of Akron. Kids were painting, coloring, doing homework, playing with the toy kitchen, etc. Instead of the normal 10-15 children from ages 4-10, there were about 20 children and most of them were under 6. Our lesson was simply too advanced! I feel like I cannot really evaluate the lesson properly because I did not get to try it with its intended age group. These children were by no means ready for work with fractions and every activity had to be adjusted.*

*In the first activity, it was difficult to get them to pay attention because the service-learning students were doing math homework with some of the older kids! This really frustrated Allison and I, but since we came into the room later than normal, they had already begun and we just rolled with it. The kids knew very little about Mexico, and I do think they enjoyed the running/tag game. When it came time to go over the pieces of information on each paper, however, the children were eager to share, but hardly any of them could read! So out of the 15 facts I had, we maybe went over five. I highlighted some major Mexican foods, Mexican climate, and most importantly, we showed them where Mexico is on the globe!*

*The students did an ok job with the relay race considering their age. In general, they understood and practiced the concept of waiting turns and running back to tag the next player. It was difficult to gauge any understanding of the way fractions fit together because students were not filling the measuring cups all the way in between dumps. So when I asked how many  $\frac{1}{2}$  cups fit into the cup, they might say three or four depending on how accurately they measured. Some of the older students definitely understood, though. For many children, however it was simply an exposure to Mexican foods like rice and beans, the idea that smaller parts fit into larger parts, and practice with fine and gross motor skills. Like I feel all the activities in this lesson ended up being, it was not useless, it was just ineffective in enforcing the concepts we had intended to cover.*

*If we thought activities one and two were rough, the taco-making simulation really clenched it. We had too many students and not enough scoops. Also, the portions we assigned for each ingredient were too large to fit nicely in their small taco shells. Since essentially none of them have even begun learning fractions in school, we just let them use any size scoop and create the taco how they wanted. The activity became more of a sensory exploration tied to teaching Mexican culture. It was fun, just not like we had planned. I did get a few students thinking about protein, fat, and grains, though! They identified the meat as a protein, the rice as a grain, and the cheese as a fat (I told them it was also a protein). So something is sticking in their brains at least! The more exposures the better!*

*The final portion of our lesson – the piñata – went better than any other part! The students were so attentive, from the smallest to the largest. They took turns perfectly and sat still while others hit the bull. They were so excited!*

*So was the lesson a total fail? No, I do not think so. Allison and I both agreed students learned a lot more about Mexican culture from this lesson than they did about Asian culture a few weeks ago. We learned from that lesson and incorporated more visuals, music, and hands on aspects of the lesson. Everything about this lesson had ties to Mexican culture and the students were able to share some of what they learned by the end of the lesson. So we got better at teaching the culture. Next time we need to readjust the planning of the activities so they are more fitting to a younger age group.*

*Following suit with our lesson upstairs, the mini-session with the mom did not go as planned either. When Allison and I got downstairs with our no bake bars and tips on healthy snacking, nearly all of the moms had left! Only about 4 remained in the kitchen doing dishes. It ended up being great, though because we really got to connect with these moms relationally. They were excited to see us, and they looooved the no bakes! I love what Allison did. She took a recipe one of the moms had posted and reworked it to make it less calories, more protein, less sugar, etc. The moms were totally interested because Allison took what interested them and made it a lesson about healthy snacking. It was great just to talk with them briefly about healthy snacks and how their weeks were going and enjoy the no- bakes. They also mentioned wanting us to come to the pumpkin patch when they all go! We are so excited they actually like us and would want us to go and just hang out with them. It is very encouraging.*

*So, this week was weird, but I definitely learned from it. This project is actually causing me to consider teaching and teaching methods, and how to connect with students way more than I thought*

*October 21, 2015*

*This week went very well and I really do not have a lot to reflect on! It was a wonderfully calm week, the week of our "healthy habit hunt!" We have been looking forward to doing this lesson all year. We still got there at 4, which was way before we had to start teaching. It was nice, though, because we got to just sit with the girls while they ate dinner and talk with them about their weeks. There were very few participants in both teen moms and young moms this week. The teen moms we paired in twos, and they were extremely motivated for the task! It was hilarious; they were racing so much they did not even notice the healthy snacks we had placed at each location in the scavenger hunt. There were only three young moms, but they still all seemed to really enjoy the task. When it came time to discuss the different habits, all the moms participated in discussion and seemed to absorb the information. Allison and I tried to be very encouraging with them, because they have been doing a great job! At the end of the lesson, we had them each make their own 3X5 cards. Interestingly, the most common habits to focus on were eat three times a day, set a time in the day to stop eating, and make a Pinterest board of healthy recipes. That last one kind of surprised me actually, but I hope those moms that chose it actually make some of those recipes! Also, I was a little surprised that so many moms put eat three times a day because we have already emphasized breakfast so much. At the same time, they are being honest in that they are still working on it, and they are still motivated to try, which is encouraging. The next three highest placed habits were, pay attention to why you're eating, stay hydrated, and do not drink calories. I am pleased with their choices and we will see next week how they did!*

*The one part of the lesson I would do a bit differently next time is the organization of the clues! Allison and I spent about an hour coming up with very catchy poem clues for each spot, but we ended up placing each clue in the spot the clue was directing you to! Fortunately we caught it before the scavenger hunt began, but it still added a lot of unnecessary confusion to our lesson. I know we could organize more clearly in the future.*

*With the children last night we did some sensory exploration with dry pasta, hummus, and avocado. We had some picky ones, but I think we got most of them to try the avocado and hummus, although most of them did not enjoy it. Multiple exposures will be the key here. We had a good time, though. They all learned that pasta comes from Italy (only one girl had previous knowledge of this) and hummus from countries like Egypt. They already knew avocados came from Mexico!*

*Next week we get another break! I think we are going to go to the pumpkin patch and corn maze with the girls.*

*October 28, 2015*

*I am glad we decided to go the pumpkin patch. It was a little cold and cloudy, but it did not rain! So many people showed up, including all the service learners and nurses from Brown Mackie. Christy and Tia both brought their week old babies. Oh my goodness! They were so tiny and precious and Allison and I held them both. It was just good to spend some time with the moms and not be talking about health and nutrition. It was a time to spend just getting to know them.*

*It is hard to be the “healthy” person in someone’s life. For instance, there was a concession stand at the farm. Everyone was getting fair fries and funnel cakes and elephant ears, and I was thinking, wow, this goes against everything we are trying to teach these moms. But we were having a special day! I would want a funnel cake too! It is hard to model moderation and tell the moms it is fine to have an occasional funnel cake, when it is clear that some of these ladies are not practicing moderation, and should not have funnel cakes at all! I do not want to judge the women, and I want to respect their decisions, but it is hard to do at times. How do I balance just being their friend when I am teaching them in some ways?? When I really think about the two sides, I have to say I believe being their friend is more important, considering my age and level of nutrient education. They are more likely to take advice from a trusted friend than a nagging teacher!*



*November 3, 2013*

*It was kind of hard getting back into the groove tonight after a week off. Also, the schedule got a little flip-flopped and we had another mini mom lesson and kid lesson tonight, then we are cooking the next two weeks in a row. Tonight with the moms we had planned to do a mini session on staying hydrated, and we prepared three different fruit flavored waters for them to try. We had very little time due to a speaker they were listening to, but it went alright still. None of the teen moms were very enthused with the flavors, but at least they tried them. Even Allison and I had to admit some of the flavors were much too strong, but we were able to laugh about it and remake some of them for the next session in which the moms were much more receptive. One mom even asked for a bag of ingredients because she really wants to stop drinking so much pop. After a few consecutive lax weeks it will be interesting to see how pasta cooking goes next week.*

*While time with the moms was not quite as full as we had hoped, the kids' lesson was fantastic! It was a much smaller group of children and they were all a little older – in the first or second grade. Also, there was a majority of girls and I think they appreciated the lesson more than a group of young boys would have. They absolutely loved the scavenger hunt and I liked how much it encouraged them to read. They were engaged the entire time, and really seemed excited to work on the tips they wrote on their cards. Out of the six habits we gave them, five were used in the note card activity, the most common being “have two vegetables a day,” and “drink three glasses of water a day.” One girl stated, “I’ve never had three glasses of water in a day!” She was determined to try, so we will see how it goes!*

*One of my favorite parts of the evening was the second activity, which we decided at the last minute to turn into a game of Pictionary. Allison and I agreed on the way home that we are getting better at adapting lessons to suit students' immediate needs both in the moment and during planning. We noticed in a previous lesson that these students really did not stay very engaged if we just ask them to discuss something, but when we add visual elements and turn activities into games, the students are extremely involved! They also paid more attention when we let them munch on carrots and grapes during the discussion. We had such a fun time.*

*Nights like tonight remind me that I like working with slightly older students! I am glad I did make the decision to switch to middle level education. My only concern currently is that we will not have time to reinforce tonight's lesson with the kids because we are cooking with the moms the next two weeks in a row!*

November 11, 2015

*Oh my goodness. I have never felt so helpless during a lesson! It is always chaotic, but this time Allison and I truly had no order to it. We planned the WHOLE lesson out on Friday. At least we thought we did. It was like we did not even know what we were doing all of the sudden! We were both so disoriented; I do not know if that is because we have not had a traditional lesson in a few weeks, particularly a cooking lesson. I think we just got too comfortable and assumed it would all go fine. What I learned from this week is we need to have much better, more specific planning. I felt dumb because as a teacher I feel like I should have been on top of that! We did not even have specific recipes for the sauces we were making for the number of people we were making it for! This was ridiculous because during the lesson, we had the moms practice adjusting recipes for different numbers of people. Appropriate recipes were not the only things we forgot, though. I forgot to bring my ninja food processor. This was alright because First Glance does have one. Using, it though was a trick. No one really knew how so it took up way too much time, and we did not use it correctly so the bottom fell out and sauce went everywhere! We also forgot to put the cheese in the Alfredo sauce, and we forgot to hand out the teen moms' 3x5 cards. We did not check points with anyone. We didn't start the pasta on time and dinner was late. Allison and I talked about how we would divide the cooking and prep work, but we did not implement those plans very well at all. Moms were wondering what to do, and we didn't really know what to tell them! All in all, it was a miracle everyone ate. This was only the Teen Moms. We still had to do it all again!*

*Allison and I were definitely shaken, but we could not give up! Young moms went about ten times better than teen moms! Everybody had food, and we had plenty left over. No sauce spilled and each mom had a job. Actually, we were so on top of it some of the moms ran out of things to do!*

*In the midst of the chaos, I did have a lot of fun with the moms last night. Our relationships are developing! I was taking selfies in the kitchen with the teen moms, and teasing/bantering with the young moms. All of the moms were in such a good mood. Well, except for the hungry pregnant mothers who just wanted their pasta! When they finally got it, they all seemed to enjoy it too, which was a huge success, in my opinion. One mom told me she hated avocado, but loved the pesto. Several of the moms mentioned how they would definitely use the veggie-hiding trick in their marinara sauce at home. Another mom said she didn't eat Alfredo, but liked the one we made. Also, they all ate whole-wheat or veggie-added pasta and enjoyed it! A lot of the moms were asking for the recipes! The pesto, veggie-marinara, and wheat pasta were the main themes in their 3D forms. Allison and I were pleased with these results.*

*There were other elements of the lesson that went well. For instance, the math component was extremely effective, Allison and I felt! We had the moms work in teams to adjust the sauce recipes to feed 8, 12, or 2 people. They still need to keep practicing these math skills, especially converting fractions. One mom expressed her answer as  $\frac{2}{4}$ . We asked her what that equaled and she gave us a blank stare and said I don't know. Most of the moms needed some of the conversions Allison wrote at the bottom of the board, but I would say they all definitely improved from last time. This time, Allison and I improved our instruction by directly assessing the results with the moms, going over the answers*

*and modeling operations with fractions on the board when necessary. This way, we truly saw what they were learning and what they still need help with.*

*Another fun part of the evening was giving the Tiny Glancers their prizes! All of the children completed their challenges, but only three brought back in their cards to receive a prize. The children and the moms were asking if we were going to do it again, so hopefully Allison and I can include one more challenge for the children in the little time we have left at First Glance. We only have one more month! We definitely had a lesson in importance of planning this week. This is slightly ironic, because we have little to no time to prepare for next week's cooking lesson with Mediterranean food and then the next week's grocery store activity! I think I am getting a good experience of what teachers must feel like all the time!*

*Now, here are a few final thoughts regarding progress. It is so hard to see if we are actually making any progress with these ladies! Are they actually choosing healthier options when they are on their own? Do they care? Unfortunately, First Glance has now separated the young moms into an older and younger group. The older group does not cook with us anymore and Allison and I feel like we were truly starting to make a difference in one of their lives. Now, we never get to check in with her. I had one mom tell me a new bagel and cream cheese combination she was trying and another mom say she was bringing buffalo chicken dip to the end party! It is so hard to find healthy food these ladies will eat! We feel we end up making "healthy" versions of unhealthy foods; we are not actually providing them with healthy foods. It is a challenge!!!!*

*Hmmm maybe we have lost focus. Maybe we need to pare it down. I was just talking to a friend from class, and she was saying how some of her friends on WIC do not even know how to boil an egg. Are Allison and I actually teaching these moms how to do basic cooking? I will say many of them do know how to cook. There are some, though, that truly do not. I wish we could back and do a better pre-assessment. I want to be giving these girls something they can use. I don't want to just come in and make a dinner that is above their level and they will NEVER try to make. Maybe Allison and I need to rethink the Mediterranean dish and simplify some. We need to find a balance. There are just so many factors to consider.*

*November 18, 2015*

*We have redeemed ourselves!! Last night was a complete 180 from last week, and Allison and I were so relieved! I really was a testament to what good planning and dividing roles can do for a lesson! In planning last week Allison and I actually wrote out recipes for each dish we were making and divided the tasks among numbers of girls. We also wrote a master schedule for the night and each knew the part of the lesson we were responsible for. I am one who gets nervous about strict schedules because I like to go with the flow and keep it natural, but after last week I realized that sometimes you need a little more definite structure. Allison and I did not follow our schedule perfectly, but having the schedule allowed us to be more flexible and everything was surprisingly calm. We actually had extra time in both groups. There was a good overall flow, and excellent participation, especially in the young moms. In teen moms, we had some tired girls. There were several new ladies, however, and they barely knew how to measure anything! They were so sweet and felt very accomplished after making the hummus perfectly.*

*I also feel this was the best cultural/geography lesson we have had, and I think that is due to my personal familiarity with Middle Eastern culture and food. Several moms put on the "discovery" section of their 3D forms that they learned about foods they have never heard of which was a huge success because that is one of our goals in this unit! Also, several moms had no idea where countries like Lebanon and Israel are, so it was good to be able to help them better understand the world around them. I think the food description game was actually helpful and fun.*

*We gave extra points this week if the moms tried all of the foods, and they all did, which was great! Most of them really enjoyed the food. Allison and I got many requests for recipes and one mom even said she would try it at home on her 3D form! On the other hand, several moms honestly admitted they did not care for any of the food, and that is ok! I am just thankful they had good attitudes and tried. That is more than they would have done at the beginning of the unit.*

*As far as negative aspects go, I was disappointed we did not get to calculate protein amounts with the teen moms. We were very worried about time and rushed through their lecture portion. We were glad to get it done with the young moms, though, as they will be more likely to think about and utilize the information. We were also disappointed with some of the negative pre-biases towards the "Middle-Eastern" foods. Several moms did not show up at all because of them and there were many who already "knew" they would not like some of the dishes. I believe attitudes affect outcomes and I feel like some moms may have gleaned more from the lesson if they came in with a more positive approach. Finally, as I already stated, the teen moms were a little out of it this week and unless we specifically told them to do something, they kind of just stood around and talked. I think they were tired and apprehensive about the food, and several ladies have been dealing with colds and flus. Hopefully next week they will be back to themselves.*

*While we loved the lesson this week and got lots of positive feedback from the leaders, Allison and I left this week wondering, "Is it all carrying through?" We have had 6 individual lessons, most of which were big hits. Now we are almost finished, and it is time to evaluate, and we are wondering, "Were our lessons effective as a unit curriculum? Are the moms receiving consistent, explicit instruction they can actually apply to their lives? Or are they just having a fun, good cooking time they will never*

*think about again?!” That is what scares us. Even if it’s one small thing, I hope the moms pull something out of this unit on nutrition they can apply to their lives from now on.*

*December 1, 2015*

*Oh my goodness tonight was our last normal lesson! Only one more week left with the moms at First Glance, and I cannot believe we have been working with them twelve weeks already! I felt like tonight I actually began to realize that we have been impacting these moms in some small way. This week our lesson was totally different. We drove to the local grocery store, and the moms competed in teams of two to come up the healthiest, cheapest meal for four. Their meal was supposed to incorporate as many elements from previous lessons the girls could remember. When Allison and I reflected on the lesson in the car we realized that this was both a strong point and a weak point of this lesson. We had several new girls, for instance. They had no idea what we have been emphasizing with the girls and this was reflected in the meals for which they chose to buy ingredients. While this lesson was not designed very well to accommodate girls who are new to First Glance, it served to evaluate regular attendees' retention of information quite nicely! We were so proud of the girls! They almost all chose meals with chicken, brown rice or whole wheat pasta, and lots of vegetables. They used olive and coconut oil and incorporated Greek yogurt. It reminded me that MULTIPLE EXPOSURE really is the ticket to learning. The moms chose the things Allison and I brought again and again to First Glance. I was so pleased that they remembered.*

*Allison and I agreed that the moms seemed very thoughtful this evening. They made a plan, thought about the ingredients they had at home, kept track of the money they were spending and successfully found the ingredients for a home cooked meal for four! While not all teams achieved a perfectly "healthy" meal, you could tell they put thought into their choices, and they all wanted to do well. Honestly, none of the groups did poorly, and it was hard to determine a winner!*

*This was actually one aspect of the lesson we agreed could have gone better. We need to work on designing point systems! It was confusing and took us a long time to configure the results. Also, we felt like we were playing favorites, or judging the girls who meals were not as healthy. I felt bad! I wanted to give them all prizes. It was the girls who came consistently, though, those girls with whom we have developed better relationships with that did the best. That makes sense, really, but it was still hard to judge the teams objectively and not seem judgmental or condescending. I couldn't help but feel like some moms were unhappy with the way we chose a winner.*

*The highlight of the evening was the winning team members from the young moms group. They chose to find ingredients for stir fry, which was one of their favorites, from the entire unit. One teammate told us, "I make stir fry all the time, and I never would have tried it if you hadn't come and made it with us." It is hard to say just how great that was to hear. She also wrote on her 3D, "thanks for all you've been doing!" She is also trying to teach one of the other struggling young moms how to cook. This girl is extremely tentative to try anything and is not at all confident in her cooking abilities so it is wonderful to see her learning from some of the more experienced moms. I cannot completely overlook the fact that these moms left the grocery store with Coke and Oreos, but at least they are learning and incorporating healthy habits into their lives also! Hopefully they will ditch the unhealthy ones soon.*

*Overall, it was a great night. I am looking forward to the potluck! Some moms seem very confident, others not too sure. We were encouraged when several asked us for recipes from past lessons or asked how they might make a certain recipe healthier. I hope*

*that each mom can at least take away one part of these lessons to put into practice in their lives!*

Feb 10, 2016

*Soooo it has been quite a while since my last reflection. The potluck did not happen in December. The potluck did not happen in January. We did not get to have the potluck until last night! Due to a death and very cold weather, the date for our final lesson with the girls kept getting bumped. We had planned to have a follow up/discussion session sometime in January and again in February, but we ended up just combining that with the potluck. We were disappointed because the ladies were enthusiastic about the potluck originally and made wonderful dishes the nights it was cancelled. This time around, though, attendance was down, several moms just didn't have the time or energy to cook, and several of the moms were new to the program. So it wasn't exactly as exciting as we had hoped. This said, we had some very good discussion with the moms that did attend. They were very honest in telling us that they have not experienced significant change in their eating habits since the beginning of our unit. We asked them why, and they said it was mainly because they were too lazy and simply did not want to give up junk food. Eating healthy still seems like too much of an inconvenience, which makes me wonder what Allison and I could have done to make it seem simpler. They did say, though, that while they may not follow better eating habits, they do think more about them. For instance, they are thinking more about drinking water; the sugar demonstration we did had a strong effect on them. They are also very into coconut oil, and love making stir-fry. One girl mentioned she thinks much more about how much salt she is putting into her body. As a teacher, this reminds me that visuals and hands on activities are the best for learning! For both salt and sugar Allison and I had manipulatives that clearly demonstrated the negative effects too much of these molecules has on the human body, and as a result, that lesson really stuck with the girls. We did not see as much growth as we may have liked, but I think we may underestimate what we have left with these ladies. They told us that they wouldn't change much about our approach, and it was the best nutrition unit they've experienced which makes me happy. Now it is time for Allison and I to take a step back and analyze this process as a whole; our project is only partially complete!*



## Appendix E: Points Spreadsheet

Name	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	TOTAL
YM1	10	8	6	-	5		5	-	6	5	45
YM2	5	7	6	-	5		5	-	6	5	39
YM3	5	9	6	6	-		-	-	6	5	37
TM1	5	8	6	-	5		-	-	5	5	34
YM4	5	8	1	6	-		-	-	6	5	31
YM5	5	7	6	-	-		-	-	6	7	31
YM6	5	7	-	-	-		-	-	6	5	23
YM7	5	-	6	6	-		-	-	-	5	22
TM2	5	6	5	-	5		-	-	-	-	21
TM3	-	9	6	-	5		-	-	-	-	20
TM4	-	1	6	-	5		-	-	6	-	18
YM8	-	7	5	-	-		-	-	-	5	17
YM9	5	9	1	-	-		-	-	-	-	15
TM5	5	-	5	-	5		-	-	-	-	15
TM6	-	-	-	-	-		-	-	6	5	11
YM10	-	-	-	-	1		-	-	-	5	6
TM7	-	-	-	-	-		-	-	6	-	6
YM11	-	-	5	-	-		-	-	-	-	5
YM12	-	-	5	-	-		-	-	-	-	5
YM13	5	-	-	-	-		-	-	-	-	5
YM14	5	-	-	-	-		-	-	-	-	5

## Appendix F: 3D Assessment Answers

<b>Bold denotes learning goal achieved</b>	<b>Discover-</b> write down one thing you discovered today that you didn't know before you came	<b>Dig-</b> write down one thing from today's lesson that you really liked and might incorporate into your life	<b>Ditch-</b> write down one thing about today's lesson you didn't like, don't care about, or won't use
<b>Lesson #1: What Does Food Do to my Body?</b>	<ul style="list-style-type: none"> <li>- <b>"I never knew what ten pounds of fat looked at compared to muscle.</b> Also I didn't know the diabetes statistic."</li> <li>- <b>"Un-saturated fats raising good cholesterol"</b></li> <li>- "Cancer eats sugar"</li> <li>- "Cancer eats sugar"</li> <li>- "Snapple is horrible for me"</li> <li>- "1 out of 2 African American children will develop diabetes"</li> <li>- "Sugar causes cancer"</li> <li>- <b>"Sugar has empties calories.</b> Unsaturated sugar is worst type of fat"</li> <li>- <b>"How much sugar is really in certain drinks"</b></li> <li>- "About the fat intake"</li> </ul>	<ul style="list-style-type: none"> <li>- <b>"I may encourage healthier eating in my family based on the info."</b></li> <li>- "More unsaturated fats"</li> <li>- "No chocolate milk"</li> <li>- "No more chocolate milk. <b>Less salt! For me and kids</b>"</li> <li>- <b>"Watch my salt/heart experiment"</b></li> <li>- "Eating less sugar"</li> <li>- <b>"Makes me more serious about salt consumption"</b></li> <li>- "Healthy grapes"</li> <li>- "Sour path grapes"</li> <li>- "Learned about different stuff about different stuff"</li> </ul>	<ul style="list-style-type: none"> <li>- "I drink a lot of water I probably will continue to enjoy my sugary drinks."</li> <li>- No response</li> <li>- "Nothing. I like learning"</li> <li>- "It was all important"</li> <li>- "I'm not sure"</li> <li>- "Everything was good"</li> <li>- "Nothing! ☺"</li> <li>- "That I have to eat less bacon"</li> <li>- "Nothing"</li> <li>- "Nothing at all"</li> </ul>
<b>Lesson #2: Asian Appetites</b>	<ul style="list-style-type: none"> <li>- <b>"Stir fry is a healthy and quick meal to make"</b></li> <li>- "My daughter will eat broccoli"</li> <li>- <b>"How to make stir fry"</b></li> <li>- "I didn't know sweet and sour sauce had ketchup"</li> <li>- "Whole grain rice tastes the same"</li> <li>- <b>"How to make home made stir fry"</b></li> <li>- "That different oils contain different levels of fat"</li> <li>- "That Asians eating weird"</li> <li>- <b>"You can encounter many veggies in a yummy healthy dish"</b></li> </ul>	<ul style="list-style-type: none"> <li>- <b>"Cooking with raw veggies"</b></li> <li>- <b>"Cooked veggie for snack"</b></li> <li>- "Everything"</li> <li>- "Cooking the chicken in coconut oil"</li> <li>- "The rice for sure"</li> <li>- "Making stir-fry more often"</li> <li>- <b>"Making more vegetables and trying more of them"</b></li> <li>- <b>"Fresh cooking"</b></li> <li>- "Knowing I'm feeding my son and others a healthy yummy meal"</li> <li>- "Peanut sauce, cook rice"</li> </ul>	<ul style="list-style-type: none"> <li>- "Finding another sauce to use besides soy. Not a huge fan"</li> <li>- "Spices/hot peppers/water chestnuts"</li> <li>- "Nothing. I'll use everything I learned"</li> <li>- "Add too much garlic, so I would probably not use garlic"</li> <li>- "All the ingredients of the stir fry. I'd use less things"</li> <li>- "Nothing. I like everything"</li> <li>- "Making sauces. Just not my forte"</li> <li>- "Nothing"</li> </ul>

	<ul style="list-style-type: none"> <li>- “How to make peanut sauce”</li> <li>- “That coconut oil is the best to cook with”</li> <li>- <b>“I learned how to make fresh stir fry”</b></li> <li>- <b>“How to cook rice”</b></li> <li>- <b>“So VG’s are good!”</b></li> <li>- “How to make peanut sauce”</li> <li>- <b>“Stir-fry is quicker to make than I thought”</b></li> <li>- “I didn’t know that food can be better for you depending on what you cook with”</li> <li>- <b>“How to make stir-fry”</b></li> </ul>	<ul style="list-style-type: none"> <li>- <b>“When you mix all vegs, they taste different. (might help them eat more)”</b></li> <li>- “I will be keeping this recipe”</li> <li>- “Eating more healthy”</li> <li>- <b>“Making more vg’s for my kids”</b></li> <li>- “Peanut sauce!”</li> <li>- <b>“More fresh veggies!”</b></li> <li>- “Finding healthier ways to cook great food”</li> <li>- “The way we ate- we already do, and we already use brown rice – <b>probably use coconut oil</b>”</li> </ul>	<ul style="list-style-type: none"> <li>- “Different seasonings”</li> <li>- “Nothing”</li> <li>- “Fish is really good never. Nope gross”</li> <li>- “I probably won’t be using red pepper”</li> <li>- “I don’t like green veg”</li> <li>- “The onion’s and green peppers”</li> <li>- “N/a”</li> <li>- <b>“I loved it all. Thanks so much guys”</b></li> <li>- “I don’t care too much for onions and would make my broccoli softer”</li> <li>- “The garlic sauce”</li> </ul>
<b>Lesson # 3: Mexican Measurements</b>	<ul style="list-style-type: none"> <li>- “That guacamole was made out of avocado”</li> <li>- No response</li> <li>- “Never heard of fried quesadillas. Never cooked them that way”</li> <li>- <b>“What exactly portion control is”</b></li> <li>- “That guacamole was made out of avocado”</li> <li>- <b>“Portions”</b></li> <li>- “Using your own seasonings”</li> <li>- “That you can make fish tacos?”</li> <li>- <b>“What a real serving is for tacos”</b></li> <li>- “Beef is better than pork”</li> <li>- <b>“How to cook fish”</b></li> </ul>	<ul style="list-style-type: none"> <li>- “Greek yogurt is good in tacos who knew ☺”</li> <li>- “Fresh pico de gallo. Black beans and corn!”</li> <li>- “Maybe don’t use refried beans too much anymore”</li> <li>- <b>“Portion control”</b></li> <li>- <b>“Greek yogurt is an awesome substitute for sour cream!”</b></li> <li>- “Tacos ☺”</li> <li>- “Peppers and onions on tacos”</li> <li>- “The green peppers with onions”</li> <li>- “I make the fish for my husband”</li> <li>- <b>“Portion control”</b></li> <li>- <b>“Everything. I loved mixing the beans and corn with the seasonings”</b></li> </ul>	<ul style="list-style-type: none"> <li>- “I don’t like black beans and don’t like the corn shells”</li> <li>- The flours</li> <li>- “Can’t think of anything”</li> <li>- “The recipe for tacos”</li> <li>- “I don’t care for the corn shells.”</li> <li>- “Portions, lol: P”</li> <li>- “Avocado”</li> <li>- “The plain tortillas ☺”</li> <li>- “I don’t eat tacos much so nothing really”</li> <li>- “Anything onions or tomatoes. Sorry, really picky”</li> <li>- “Nothing”</li> </ul>
<b>Lesson #5: Knowledge and</b>	<ul style="list-style-type: none"> <li>- “Yogurt in Alfredo sauce”</li> <li>- <b>“A new way to make</b></li> </ul>	<ul style="list-style-type: none"> <li>- <b>“Vegetables incorporated in</b></li> </ul>	<ul style="list-style-type: none"> <li>- “Avocados”</li> <li>- “The green sauce”</li> </ul>

<b>Noodles</b>	<b>Alfredo sauce”</b> - “The veggie pasta and alfredo very good” - <b>“You can hide vegetables in tasty foods”</b> - “That you can make spaghetti sauce with avocado” - “Pesto is made from avocado” - “How much Italians eat” - “How to make pesto sauce” - <b>“You can put more vegetables in sauce and it still tastes good”</b> - “Basil is in the green sauce.” - “Wheat spaghetti is good”	<b>sauce”</b> - “Fried onions and zucchini” - “The alfredo sauce” - <b>“How to make my favorite sauces homemade”</b> - “The zucchini and onions so good: D” - <b>“Healthy tomato sauce”</b> - <b>“Put veggies in the sauce”</b> - <b>“Learning how to make pesto sauce”</b> - <b>“Cooking more food”</b> - “Pasta” - “Same. And red sauce”	- “The pesto was sour, I might do it different” - “N/a” - “The alfredo not so good” - “Pasta could be good and healthy” - “Avocado sauce” - “Nothing” - “I don’t like zucchini.” - “Basil” - “No alfredo ☺”
<b>Lesson #6: Meatless in the Mediterranean</b>	- <b>“I learned about different foods I never heard of.”</b> - <b>“What Middle Eastern food was.”</b> - <b>“I wasn’t aware about how much protein I’m suppose to consume”</b> - “Store bought hummus is totally different than homemade.” - “Not all Eastern food is spicy.” - “I was making food together having fun with the girls” - <b>“How to make hummus”</b> - <b>“How to make hummus”</b> - <b>“How to make hummus”</b> - <b>“I realized I like hummus”</b>	- “I liked most of the food and the people as well.” - “Everything” - “Unfortunately, I didn’t like anything” - “Beans, rice and pita bread” - “Pita/beans” - “Talking more, making friends” - “The beans and rice” - “Nothing” - “Maybe a different version of the beans and rice” - <b>“I like learning how to make the food. I might try it at home.”</b>	- “I don’t have one.” - “The hummus” - “I didn’t enjoy much, but I did like preparing the food.” - “Hummus unless I was on an island and had to.” - “Flavor, needed spice” - “I thought every here was nice.” - “Hummus. I still don’t love hummus” - “All of it, sorry thank you though” - “Tabouli was okay, don’t really care for that or hummus” - “Everything was great”

<p><b>Lesson #7: Good for you Groceries</b></p>	<ul style="list-style-type: none"> <li>- <b>“How much salt, sugar, and sodium are in food.</b> And when you ingredients with less of these things it costs less.”</li> <li>- <b>“When shopping, consider sodium”</b></li> <li>- <b>“Stir fry is very cheap and make for a large group”</b></li> <li>- “That too much salt is not good for you”</li> <li>- “That cheese has a lot more sodium than I acknowledged”</li> <li>- <b>“\$25 for a meal can happen”</b></li> <li>- <b>“A clean healthy meal can be bought for under \$25 that serves four people”</b></li> <li>- “I knew stir-fry was healthy, just didn’t know it was that healthy.”</li> <li>- <b>“You can feed four for under \$25.”</b></li> <li>- “How to cook healthier.”</li> <li>- “No”</li> <li>- “For this lesson, I didn’t learn anything different.”</li> <li>- “About healthy foods.”</li> </ul>	<ul style="list-style-type: none"> <li>- <b>“Going grocery shopping by myself now”</b></li> <li>- <b>“Ways to substitute foods to make things healthier”</b></li> <li>- “Trying to get things cheaper”</li> <li>- “Going shopping more”</li> <li>- “The interaction and brainstorming”</li> <li>- “The game”</li> <li>- “The type of chicken Acme has (never shop there)”</li> <li>- The point system Sarah and Allison used it can help me to search for healthy foods”</li> <li>- <b>“That we can use what we learned at the grocery store.”</b></li> <li>- “To cook healthy food.”</li> <li>- “Brown rice, not white rice.”</li> <li>- “Coconut oil”</li> <li>- “Making healthy choices.”</li> </ul>	<ul style="list-style-type: none"> <li>- “I cared about everything because it could benefit us in a healthy way”</li> <li>- “Price would make a difference. I plan meals cheaper”</li> <li>- <b>“I loved it period.”</b></li> <li><b>Thanks fro everything you have done during this!</b></li> <li>- “I really don’t like losing”</li> <li>- “I am a very conscience shopper- so I always look for the deals”</li> <li>- “We should have won, lol ☺”</li> <li>- “I didn’t think there was anything I didn’t enjoy about today.”</li> <li>- “Disrespect from other young moms. Nothing to do with the lesson.”</li> <li>- “Nothing.”</li> <li>- “I don’t like brockley”</li> <li>- “Mushrooms”</li> <li>- “Open to new things”</li> <li>- “None”</li> </ul>
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## Appendix G: Ingredients List

### Lesson 2: Asian Appetite

**Menu:** Chicken vegetable stir-fry with brown rice

Peanut Sauce

Garlic Sauce

Sweet & Sour Sauce

**Ingredients:** chicken breast, onions, green peppers, broccoli, water chestnuts, carrots, bean sprouts, zucchini, mushrooms, brown rice, coconut oil, seasonings, honey, white vinegar, ketchup, water, corn starch, garlic, sesame oil, liquid amino acid, reduced sodium vegetable broth, peanut butter

### Lesson 3: Mexican Measurements

**Menu:** Fish and Beef tacos

Avocado Pico de Gallo

Beans and Corn

**Ingredients:** frozen tilapia, lean ground beef, coconut oil, cilantro, avocado, tomatoes, onion, black beans, corn, cheddar cheese, spices, soft corn tortillas, Greek yogurt

### Lesson 5: Knowledge and Noodles

**Menu:** Whole Grain Spaghetti with Chicken and Tri-colored Rotini with Meatballs

Greek Yogurt Alfredo

Basil Avocado Pesto

Vegetable Marinara

**Ingredients:** noodles, chicken breast, frozen turkey meatballs, Greek yogurt, olive oil, chicken broth, parmesan, garlic, milk, fresh basil, avocado, lemon juice, canned peas, canned carrots, tomato sauce, garlic, spices

### Lesson 6: Meatless in the Middle East

**Menu:** Mixed Rice, Beans, and Veggie Medley

Tahini Yogurt Sauce

Hot Sauce (bottled)

Hummus and Veggies

Tabouli (store bought)

Pita Bread

**Ingredients:** brown rice, kidney beans, chick peas, carrots, green peppers, onion, peas, tahini paste, lemon juice, Greek yogurt, spices